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DEPARTMENT OF AGRICULTURE Animal and Plant Health Inspection Service

7 CFR Part 319

[Docket No. 94-116-5]

RIN 0579-AA84

Importation of Fresh Hass Avocado Fruit Grown in Michoacan, Mexico

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the regulations governing the importation of fruits and vegetables to allow fresh Hass avocado fruit grown in approved orchards in approved municipalities in Michoacan, Mexico, to be imported into certain areas of the United States, subject to certain conditions. We are taking this action in response to a request from the Mexican Government and after reviewing public comments regarding that request and conducting a pest risk assessment. The conditions to which the importation of fresh Hass avocado fruit will be subject, including pest surveys and pest risk-reducing cultural practices, packinghouse procedures, inspection and shipping procedures, and restrictions on the time of year shipments may enter the United States, will reduce the risk of pest introduction to an insignificant level. Furthermore, climatic conditions in those areas of the United States into which the avocados will be allowed will preclude the establishment in the United States of any of the exotic plant pests that may attack avocados in Michoacan, Mexico.

EFFECTIVE DATE: March 7, 1997.

FOR FURTHER INFORMATION CONTACT: Mr. Ronald C. Campbell, Staff Officer, Port Operations, PPQ, APHIS, 4700 River Road Unit 139, Riverdale, MD 20737-1236, (301) 734-6799; E-mail: rcampbell@aphis.usda.gov.

SUPPLEMENTARY INFORMATION:

Background

The Fruits and Vegetables regulations contained in 7 CFR 319.56 through 319.56-8 (referred to below as the regulations) prohibit or restrict the importation of fruits and vegetables into the United States to prevent the introduction and dissemination of injurious insects that are new to or not widely distributed within and throughout the United States. The regulations do not provide for the importation of fresh avocado fruits grown in Mexico into the United States, except to Alaska under the conditions specified in § 319.56-2bb.

On November 15, 1994, we published an advance notice of proposed rulemaking (ANPR) in the Federal Register (59 FR 59070-59071, Docket No. 94-116-1) announcing that the Animal and Plant Health Inspection Service (APHIS) had received a request from the Government of Mexico to allow, under certain conditions, the importation of fresh Hass avocado fruit grown in approved orchards in approved municipalities in Michoacan, Mexico, into certain areas of the United States. We solicited comments concerning the Mexican Government request for 28 days ending on December 13, 1994, and two public hearings were held in late November 1994 concerning issues raised in the ANPR. On December 19, 1994, we published a document in the Federal Register (59 FR 65280, Docket No. 94-116-2) informing the public that we had reopened the comment period and would continue to accept comments until January 3, 1995, including any comments received between December 13 -- the close of the original comment period -- and December 19. By the close of the extended comment period, we had received over 300 comments concerning the ANPR.

On July 3, 1995, we published in the <u>Federal Register</u> (60 FR 34831-34842, Docket No. 94-116-3) a proposed rule to allow fresh Hass avocado fruit grown in approved orchards in approved municipalities in Michoacan, Mexico, to be imported into certain areas of the United States, subject to certain conditions. The proposed rule, which was published in response to the Mexican Government request mentioned above, included additional proposed phytosanitary requirements that we believe addressed many of the concerns expressed in the comments received in response to our November 1994 ANPR. The proposed rule also announced the availability of two documents that examined the risks associated with the proposed importation

program: "Risk Management Analysis: A Systems Approach for Mexican Avocado," which is referred to below as the risk management analysis, and "Importation of Avocado Fruit (<u>Persea americana</u>) from Mexico: Supplemental Pest Risk Assessment," referred to below as the supplemental pest risk assessment.

On August 4, 1995, we published a notice of public hearings in the <u>Federal Register</u> (60 FR 39889-39890, Docket No. 94-116-4) that detailed the dates, times, and locations of five public hearings regarding the July 1995 proposed rule.

We solicited comments concerning the July 3, 1995, proposed rule for 105 days ending on October 16, 1995. We received 2,080 comments by that date, including 211 oral comments delivered at the five public hearings. Slightly more than 60 percent of the commenters -- 1,254 commenters out of 2,080 -- identified themselves as working in the domestic avocado industry, either directly as growers, packers, and shippers, or indirectly as part of their work in associated fields (agricultural consultants, pest control advisors, nurserymen, etc.). The remaining commenters included representatives of other agricultural interests, such as apple and citrus growers, packers, and shippers; members of Congress; representatives of State, local, and foreign governments; university researchers and professors; owners and employees of produce markets and retail operations; consultants; customs brokers; and representatives of numerous associations such as chambers of commerce, farm bureaus, marketing associations, consumer groups, and trade associations. Three hundred and ten of the commenters supported the proposed rule; 1,751 opposed it. Twenty-three of those comments opposing the proposal were petitions signed by a total of 958 individuals. Nineteen of the comments neither supported nor opposed the proposal; 8 of those comments were postcards containing only a name and address, and the remaining 11 comments argued both sides of the issue, asked only that we use science as the sole criterion for making a decision, or discussed risk assessment methodology in general terms.

Those commenters who supported the proposed rule generally expressed their faith in the ability of the proposed systems approach to allow for the safe importation of Hass avocados from Mexico. Many of those commenters supporting the proposed rule also cited the need for the United States to lead the way in the elimination of non-tariff trade barriers.

The comments of those who opposed the proposed rule generally fell into one of three categories: (1) Dissatisfaction with the quantity or quality of the pest trapping and surveys conducted in Mexico and APHIS' supporting documentation, (2) skepticism with regard to how closely the proposed safeguards would be followed in Mexico, and (3) skepticism regarding APHIS' ability to effectively monitor and enforce the safeguards contained in the systems approach. These concerns were also raised in a study prepared by the University of California at Riverside's Center for Exotic Pest Research titled "Risks of Exotic Pest Introductions from Importation of Fresh Mexican Hass Avocados into the United States." This study was submitted as a comment on the proposed rule and, as such, has been carefully reviewed by APHIS and is addressed in this final rule. The specific comments pertaining to the proposed rule are discussed in detail, by subject, below.

Risk Management Analysis and Supplemental Pest Risk Assessment Documents

<u>Comment</u>: The proposed rule states that <u>Anastrepha</u> spp. fruit flies have never been found in Hass avocados outside of laboratory tests, but APHIS itself said in a 1987 <u>Federal Register</u> document (52 FR 27669-27672, Docket No. 87-101, July 23, 1987) that its records showed over 200 <u>Anastrepha</u> finds in avocados intercepted at the U.S./Mexican border from smugglers.

Research Service records, Anastrepha fruit flies have never been found in Hass avocados outside of laboratory tests." In their interception records, APHIS inspectors do not normally record the variety of the fruit involved in a pest interception, so these written records are silent as to whether any Hass avocados were involved in those pest detections reported in the 1987 Federal Register document. However, APHIS Plant Protection and Quarantine officers at the

El Paso, TX, border crossing report that they have cut thousands of confiscated Hass variety avocados without intercepting any fruit fly larvae. Similarly, Japanese plant health officials report that they have not detected any fruit fly larvae in more than 5 million kilograms of Mexican Hass avocados that have been imported into Japan since 1992.

Comment: APHIS' risk management analysis declares: "There is a small possibility that part of or a whole shipment could be periodically diverted to southern States. Since California Hass would be out of season, detection would be fairly easy." Similarly, the supplemental pest risk assessment states, with regard to Florida and California, that "...it would be relatively easy to detect smuggling or intentional diversion of shipments because Hass avocado fruit are not otherwise generally available in those areas during the winter months." To the contrary, the Avocado Market Research and Information Center of the California Avocado Commission (CAC) reports that during the 1991 to 1994 marketing years, movement of California Hass avocados to destination markets averaged 8.533.212 pounds for the month of November: 10,636,068 pounds for December: 18,108,162 pounds for January; and 19,530,637 pounds for February. To claim that domestic Hass avocados are out of season during the months of November through February is simply incorrect; that assertion, therefore, cannot be used to support APHIS' argument that the seasonal unavailability of domestic Hass avocados will make it easy to detect Mexican Hass avocados in prohibited States. It follows that the risk reduction estimate of 95 to 99 percent attributed to limited U.S. distribution is insupportable because it will be more difficult than originally thought to detect transshipment. APHIS must reevaluate this supposed mitigation measure in view of factual realities.

Response: We agree that the characterization of domestic avocados as "out of season" and "not... generally available" between November and February was inaccurate. Domestic production is lower during that period -- especially during November and December -- but not as low as those statements in the supplemental pest risk assessment and the risk management analysis suggest. The availability of domestic avocados in larger numbers than originally recognized does not, however, have a significant impact on our risk reduction estimates. The risk management analysis indicates that the 95 to 99 percent risk reduction estimate noted by the commenter is the reduction realized by limiting distribution versus allowing distribution throughout the United States. Our ability to detect Mexican avocados in markets outside the approved distribution area does play a role in the estimate of risk reduction, but the risk reduction estimate is based more on our expectation that the vast majority of the imported avocados will remain in the approved States. The supplemental pest risk assessment considered the possibility that as much as 5 percent of the imported fruit could be transported to a habitat suitable for pest establishment (which is a subset of all non-approved States) and still concluded that the risk of a pest outbreak would be insignificant. Another factor to consider is our decision to include in this final rule a requirement for all Mexican avocados imported into the United States to be individually labeled with a sticker that identifies the packinghouse in which the avocados were packed for shipment to the United States. (The new stickering requirement is in response to a separate comment that is discussed later in this document.) The stickering requirement will work to both discourage transshipment and facilitate identification of Mexicanorigin avocados.

<u>Comment</u>: The persea mite, which is now devastating groves in California, is believed to have originated in Mexico or Central America. Why was the persea mite not considered in the supplemental pest risk assessment?

Response: During the risk assessment process, APHIS collected information on the persea mite (Oligonychus persea, also known as the avocado mite) and considered the risk posed by this pest. Unfortunately, this species was mistakenly not included on the list of potential arthropod quarantine pests in table 3 of the supplemental pest risk assessment. However, the persea mite is currently established in the United States and is not considered a quarantine pest. Pests that do not satisfy internationally accepted criteria of a quarantine pest are not analyzed in detail in risk assessments because non-quarantine pests are not candidates

for risk mitigation. Although  $\underline{O}$ , persea should have been listed on the pest list, its inclusion would not have changed the supplemental pest risk assessment beyond the pests listed in table 3. Listing of  $\underline{O}$ , persea in table 3 would not have changed the findings of the risk assessment and would not have altered the proposed mitigation program, which focuses on quarantine pests.

<u>Comment</u>: The leaf spotter, a pest identified in "Australian literature" that lays its eggs on immature fruit and eventually covers the fruit in pustules, occurs in Mexico and was not addressed in the supplemental pest risk assessment.

Response: We are not aware of an avocado pest referred to as the "leaf spotter." Nonetheless, we reexamined the scientific literature and believe that the commenter may have been referring to one of two insect pests. Homona spargotis (Lepidoptera: Tortricidae) was first detected in the Australian State of Queensland in 1980 and since then a few papers discussing this pest have appeared in the Australian literature. One common name associated with this pest is "avocado leafroller" but one paper reports that "serious damage also results from superficial scarring of the fruit." Amblypelta nitida (Hemiptera: Coreidae) also occurs in Queensland and is listed as a pest of macadamia and avocado. This true bug is sometimes referred to as the "fruit spotting bug." However, we could find no evidence linking either of these pests with Mexican avocados. According to the scientific literature, all available pest data bases, and taxonomic specialists on these insect groups, neither of these pests have ever been detected in Mexico.

<u>Comment</u>: Too little is known about the basic taxonomy, biology, and ecology of the avocado seed pests and stem weevils that attack the avocados in Michoacan. Similarly, it is not known which species of <u>Anastrepha</u> attacks avocado fruit. Overall, there is a dearth of survey data and other reliable information on the population levels of all the pests of concern in Michoacan. More information must be gathered through additional precertification trapping and surveys before APHIS can construct a scientifically valid systems approach for the importation of Hass avocados from Michoacan, Mexico.

Response: On the contrary, we believe that there is sufficient information available regarding all of the pests of concern. By way of illustration, our risk management analysis and its attachments together contain over six pages of literature citations that back up the information and conclusions found in that document. Similarly, the supplemental pest risk assessment lists nearly four pages of citations. Avocados and pests of avocados have been studied in detail for many years, especially in Mexico, which is the world's largest producer and consumer of avocados. We believe that the information contained in the existing literature, along with ongoing studies, surveys, and trapping, provides a rational, reasonable, and scientifically valid basis for the safeguards contained in this final rule, safeguards that we believe will allow for the safe importation of Hass avocados from Michoacan, Mexico.

<u>Comment</u>: Mexican avocados should be prohibited entry into the United States until zero pest risk can be guaranteed.

Response: If zero tolerance for pest risk were the standard applied to international trade in agricultural commodities, it is quite likely that no country would ever be able to export a fresh agricultural commodity to any other country. There will always be some degree of pest risk associated with the movement of agricultural products; APHIS' goal is to reduce that risk to an insignificant level. In the case of Hass avocados from Mexico, we believe that the overlapping and redundant safeguards contained in this final rule will reduce the pest risk associated with their importation to an insignificant level.

<u>Comment</u>: The State of Michoacan in general and the four municipalities listed in the proposed rule in particular are extremely diverse in terms of elevation and environment. Temperature data have not been provided to support the claim that temperatures are "generally" below 70 °F throughout the area during the months of November through February, and it seems likely that in some locations -- especially at lower elevations -- temperatures would be over 70 °F for parts of some days during the export period. Has APHIS taken into account

these differences in elevation, temperature, and likely levels of pest activity in Michoacan? In addition, APHIS' statement that <u>Anastrepha</u> spp. will not oviposit below 70 °F is erroneous.

Response: The proposed rule stated that fruit flies reduce mating and oviposition when temperatures fall below 70 °F, not that they stop such activities. Our data show that although daytime temperatures may rise above 70 °F, which happens on some days, usually for a short time in the late afternoon, the average temperature in the region during November through February is between 62 and 64 °F, with nighttime lows in the 40's. Studies conducted by the Agricultural Research Service (ARS) of the U.S. Department of Agriculture (USDA) have shown that the Mexican fruit fly is less active, and oviposits less at temperatures below 70 °F, so the climate is not favorable to fruit fly activity during the proposed shipping season. The unfavorable climate, combined with the Hass avocado's non-preferred host status, make it likely that the infestation threat posed to the avocados by Anastrepha spp. fruit flies will be insignificant.

<u>Comment</u>: The trapping data provided in support of the proposed rule indicates that <u>Anastrepha</u> spp. fruit flies were trapped at 17 percent of the trapping sites. This indicates that Mexican fruit fly and other <u>Anastrepha</u> spp. fruit flies are present in the Michoacan avocado groves.

Response: We have acknowledged that Anastrepha spp. fruit flies are present in Michoacan, which is why the regulations in this final rule set forth safeguards to prevent the introduction of those pests. The requirements, such as surveillance trapping, increased trapping in response to a single fruit fly detection, Malathion bait treatments, covering of harvested avocados, fly-proof screens on packinghouses, and inspections, work together with the non-preferred host status of Hass avocado fruit attached to the tree to eliminate any significant risk from Anastrepha.

<u>Comment</u>: No rational basis is given for a number of the probability and confidence estimates used in the supplemental pest risk assessment. For example, the estimate for P6 (probability of infested fruit introduced into a suitable habitat leading to an outbreak) is very weakly supported. As used in the supplemental pest risk assessment, these estimates are inappropriate, misleading, and create a false sense of security. A transparent, thoroughly documented, and replicable risk analysis should be prepared and submitted to peer review.

Response: As stated in the supplemental pest risk assessment (p. 26), and in accordance with internationally accepted guidelines for pest risk assessment, when specific data were not available to provide precise estimates for a particular probability, estimates were based on available data and expert judgment. Estimates based largely on expert judgment typically have a degree of uncertainty associated with them. We accounted for the uncertainty of our estimates by characterizing them as a distribution of potential probabilities (i.e., as probability density functions) instead of point estimates. Some commenters indicated that APHIS underestimated the probabilities while others indicated that APHIS has overestimated the risk of importing Mexican avocado fruit. However, APHIS did not receive any information (e.g., biological, regulatory, statistical, or methodological) that could be interpreted as evidence that the probability estimates were incorrect, or that they should be changed.

<u>Comment</u>: The supplemental pest risk assessment was conducted improperly and fails the test of peer review. Thus, its results must be rejected and provide no basis for accepting the proposed rule.

Response: The methods used by APHIS have been subjected to extensive internal and external peer review and have been accepted within the United States and internationally. Some commenters on this issue, including two individuals identified as risk assessment experts, commented that APHIS' risk assessment constituted correct and appropriate use of risk assessment tools. A variety of official commenters and peer reviewers, including risk assessment experts, commended APHIS' risk assessment, commented that the methods had been applied appropriately, and considered the conclusions to be justified and believable.

Comment: The APHIS supplemental pest risk assessment and risk management analysis

documents were not prepared in accordance with North American Plant Protection Organization (NAPPO) and the United Nations' Food and Agriculture Organization (FAO) risk assessment guidelines.

Response: All of the components of plant pest risk analysis as described by FAO (1995) and NAPPO (1995) are present in either the risk management analysis or the supplemental pest risk assessment. Despite the fact that the FAO and NAPPO documents are only in draft form, and despite the fact that these documents are guidelines and not standards, APHIS satisfied the requirements of each step suggested by the FAO and NAPPO documents. It is true, however, that the order in which the information is presented in the two APHIS documents is not along the general theoretical lines of: (1) Initiate risk analysis because of a new request for importation; (2) assess the base risk; (3) develop a risk mitigation program; and (4) conduct and monitor the risk mitigation program. The situation with Mexican avocado fruit is more complex because over the past few decades APHIS has considered repeatedly the risks of importing Mexican avocado fruit. The two APHIS documents cover risk assessment and risk management, but the various components of these two documents do not represent a simple chronological progression of events. The supplemental pest risk assessment includes a more complete assessment of the baseline risks than was presented in previous risk assessments (e.g., see attachments 1 (entomology risk assessment) and 2 (pathology risk assessment) in the risk management analysis). APHIS' risk analysis work started long before FAO prepared the first draft of its guidelines. APHIS has offered for public consideration a number of documents prepared on this issue over the years. Although the chronology of these documents does not match the order given in the FAO guidelines, all of the components of a complete pest risk analysis as recommended by FAO are available in the documents prepared by APHIS.

<u>Comment</u>: The criteria for the assignment of risk estimates found within the supplemental pest risk assessment are explained well, but the rationale for the risk estimate assigned to each of the quarantine pests is essentially absent. The summary conclusions are appropriate but should be explained clearly so that the reasoning and logic used to estimate risk can be easily and fully understood.

Response: Most of the estimates were based to some extent on expert judgment. APHIS did not elaborate on the components of the professional judgment used by team members because such elaboration would be a statement regarding the background and experiences of the scientists involved. The summary conclusions are not explained in detail, but we believe that our final assessment of the plant pest risk regarding each category of pest is well represented in tables 9 and 10 of the supplemental pest risk assessment.

Comment: The only Mexican avocado pest survey data made available in support of the proposed rule were 1993-1994 data from 129 groves in the Michoacan municipalities of Periban, Salvador Escalante, Tancitaro, and Uruapan. Current pest management practices in Michoacan avocado orchards emphasize prophylactic treatments with broad-spectrum pesticides (typically 12 treatments per year in export groves). No specifics were provided regarding what pesticides were used, how they were applied, and when treatments were applied in relation to the survey data. Given this, it is impossible to determine what impacts the pesticide treatments may have had on the data and what effect future alterations in pesticide use patterns may have on pest populations in the growing areas.

Response: As we noted in the proposed rule, some trapping was conducted while trees were being treated with pesticides. Clearly, such treatments will have an effect on pest populations, and that effect would have been reflected in the survey data. This sort of pesticide treatment is routine in Michoacan, and similar pesticide treatment will occur in orchards growing avocados for export to the United States, so we believe that trapping conducted during or after pesticide treatment provided accurate population data. This final rule requires that annual surveys and routine trapping be conducted in the production area as part of the avocado export program, so future alterations in pesticide use patterns would also be reflected in the pest population data gathered from those activities.

<u>Comment</u>: The key hypothesis that Hass variety avocados have a high level of natural resistance to <u>Anastrepha</u> spp. fruit flies is supported only by weak data and inference. The hypothesis is readily testable and should be thoroughly evaluated using proper scientific protocol before it is factored into the analysis. If sound data are collected to support the hypothesis of <u>Anastrepha</u> resistance, then the physiological basis for that resistance should be determined. Otherwise, changes in environmental or other factors (e.g., drought, tree stress, etc.) that affect fruit physiology could negate the resistance, as was the case with Sharwil avocados in Hawaii.

Response: APHIS' use of presumed host resistance in its systems approach is based on studies conducted in Mexico and Central America, some of which were conducted by the ARS, that have repeatedly shown avocados to be poor hosts of fruit flies and that have never pointed to Hass avocados as an Anastrepha fruit fly host. These studies are backed in practical terms by the experience of APHIS personnel at the U.S./Mexican border who have been cutting confiscated avocados, including Hass variety avocados.

Mexico is the world's largest producer and consumer of avocados; there are over 80,000 hectares of avocados planted in the State of Michoacan alone. The avocado is a large, economically significant crop in Mexico around which has developed an industry dedicated to the growing and marketing of avocados. Industry and university researchers in Mexico have prepared numerous publications regarding the identification and control of pests of avocados, yet there are no publications on the control of Anastrepha spp. fruit flies in Hass variety avocados. APHIS' own interception records over the past several years confirm that no Anastrepha spp. fruit flies have been found infesting Hass avocados. We believe, therefore, that the conditions set forth in the proposed rule and in this final rule adequately address the pest concerns associated with the importation of Hass avocados from Mexico and would detect a problem if one were to exist.

<u>Comment</u>: Compliance is assumed in many aspects of APHIS' risk assessment process, failing to take into account human behavior (e.g., greed leading one to repack and transship Mexican avocados out of the approved area).

Response: Human error and purposeful deceit were considered continuously during the risk assessment process and during estimation of each of the probabilities. Some probability estimates were based almost exclusively on our consideration of human error and deceit. For example, in the supplemental pest risk assessment, P5, the probability that fruit would be transported to an area with suitable hosts and climate (i.e., transshipment to areas outside the approved States), ranged from 0.5 percent to 5 percent under the proposed program. Such transshipment could occur only as a result of human error or purposeful deceit, so our estimate of risk resulted directly from our consideration of the possibility of human error and the incentive for purposeful deceit.

<u>Comment</u>: APHIS should include the risk of infestation due to vehicle accidents in warm southern States and transshipment as part of its risk analysis.

Response: Scenarios such as accidents during transport and transshipment were included in the supplemental pest risk assessment and were considered as part of P5, the probability that fruit would be transported to an area with suitable hosts and climate, and P6, the probability that infested fruit in a suitable habitat leads to outbreak.

<u>Comment</u>: APHIS should convene an independent scientific panel to review the APHIS risk assessment plan and determine if the plan is in accord with accepted scientific principles. Until then, the proposal should be withdrawn.

Response: We heard the call for an independent scientific review of the proposed systems approach and risk reduction plans even before the proposed rule was published on July 3, 1995. In the proposed rule, we announced that 2 days of hearings would be held to focus exclusively on the APHIS risk assessment documents upon which the proposed rule was based in order to provide an opportunity for experts in relevant disciplines to present their views on those documents and the scientific issues raised by them. Those hearings, which were

conducted on August 17 and 18, 1995, produced testimony from 25 speakers. In addition to that oral testimony, we received written comments from interested experts in various disciplines during the comment period. We believe, therefore, that scientists and independent scientific panels had ample opportunity during the 105-day comment period to present their opinions on the APHIS risk assessment plan.

<u>Comment</u>: The only realistic protection for the United States is to insist on "certified infestation-free zones." APHIS should insist on additional studies, at least 3 years in duration, before proceeding with any change in the policy. This would be consistent with the NAPPO guidelines for the establishment of a pest-free zone. If APHIS is truly interested in maintaining the integrity of phytosanitary standards, it will demand further study resulting in the establishment of these pest-free zones.

Response: As we explained in the proposed rule and in this final rule, APHIS uses systems approaches to phytosanitary security to allow fruits and vegetables to be imported safely into the United States from countries that are not free of certain plant pests. Our experience with systems approaches for the importation of commodities and systems approaches for domestic commodities has demonstrated that such approaches can be used safely and successfully to allow for the importation or exportation of fruits and vegetables from countries or areas that are not free from pests. In this instance, we believe that the systems approach to phytosanitary security found in this final rule will prevent the introduction of plant pests into the United States from Michoacan. Therefore, we do not believe that it is necessary to establish Michoacan as a pest-free zone prior to importing Hass avocados.

<u>Comment</u>: The supporting documentation for the proposed rule mentions that large-scale fruit cutting was conducted in Mexico to determine pest prevalence in Michoacan's export avocado groves, but no data were offered to back up those claims. The data regarding fruit cutting should be made available to the public.

Response: This information may be obtained by contacting the person listed under FOR FURTHER INFORMATION CONTACT, as several individuals did following the publication of the proposed rule. The cutting data are available in at least summary form for the period 1985 to 1991, and detailed information is available for groves and packinghouses for certain of those years.

<u>Comment</u>: A university researcher reported that she discovered immature avocado stem weevil larvae in an export grove in Michoacan during a 1994 trip to the region. APHIS' risk documents, however, state that none have been found.

Response: The researcher mentioned in the comment traveled to Michoacan as part of a joint APHIS/CAC team that went to Mexico on an information-gathering trip to look at orchards infested with stem weevils and seed weevils. The team visited a grove that appeared to be poorly managed and, within 5 minutes, found the avocado stem weevil to be present in trees within the orchard. The orchard was not certified for Sanidad Vegetal's export program. Later that day, however, a pest management consultant who had not visited the orchard in question speculated that it had once been an export orchard. It was that encounter with the consultant that led the researcher to conclude that she detected avocado stem weevils in an export grove.

Prior to APHIS' interest in the stem weevil, Sanidad Vegetal was not certifying export orchards as being free of stem weevils, so it is possible that some orchards that had previously been certified for the export program did have stem weevil infestations. In 1994, however, Sanidad Vegetal instituted surveys for the stem weevil, and all orchards certified for the U.S. export program will be required to be free from the pest. Sanidad Vegetal inspectors know how to survey for stem weevils, and the experience of the APHIS/CAC team illustrates that the pest is not difficult to detect.

<u>Comment</u>: The Monte Carlo model used in the supplemental pest risk assessment was unnecessary in the first place and only provides a veil of analytical objectivity; the model predicts what was initially assumed. The data upon which parameters for the model were

estimated are either nonexistent or are not adequately documented. The results of the model cannot be accepted with any level of confidence.

Response: Monte Carlo simulation is a well-established and scientifically based tool of risk assessment. One of the primary utilities of this method is its ability to account for uncertainty in risk predictions. APHIS used Monte Carlo simulations because uncertainty existed with regard to the true value of some of the component probabilities. Monte Carlo simulations provided estimates of risk in the desired format, i.e., risk expressed as a range of values, each with an associated probability. Data are available that affect each of the estimates made in the risk assessment. Much of the information used by APHIS to estimate risk can be found in the scientific sources listed in section IV of the supplemental pest risk assessment. Section IV of that document lists 58 separate sources of information, 53 of which are scientific references; the remaining 5 can be considered "regulatory" references. APHIS is confident that its characterization of risk is accurate. Although some commenters disagreed with our assessment of the risk, no specific evidence was provided that indicated that the risk assessment model should be changed or that the associated probability estimates should be reconsidered. Systems Approaches

<u>Comment</u>: The term "systems approach" should be defined in the regulations.

Response: There is no need to define the term in the regulations because the term is not used in the regulations. The term "systems approach" is used in the preamble portion of the proposed rule and this final rule, as well as in the two risk documents, to describe an overlapping, redundant series of safeguards that, in this case, will be applied to the importation of avocados from Mexico. The safeguards themselves are set forth in the final regulations, but the term used to describe those safeguards collectively is not.

<u>Comment</u>: APHIS compares its proposed systems approach for Mexican avocados to the systems approaches used for the importation of Unshu oranges from Japan, peppers from Israel, and tomatoes from Spain. However, APHIS fails to mention that the Unshu oranges must be grown and packed in isolated, canker-free export orchards surrounded by disease-free buffer zones, or that the Spanish tomatoes and Israeli peppers must be grown in insect-proof plastic screenhouses. Measures such as orchard/buffer zone freedom from pests and enclosed growing areas vastly reduce the pest risks presented by those commodities; there is no equivalent degree of protection built into the proposed system for Mexican avocados.

Response: In the proposed rule, we explained that APHIS uses systems approaches to establish conditions whereby fruits and vegetables may be imported into the United States from countries that are not free of certain plant pests. There is no "one size fits all" systems approach; specific measures are necessary to address specific pest risks, so different commodity/pest combinations will require different approaches. Just as the systems approaches for Unshu oranges, Spanish tomatoes, and Israeli peppers lower the pest risks associated with each commodity to an acceptable level, we believe that the required safeguards in this final rule will allow Hass avocados to be safely imported into the United States by lowering the risk of pest introduction to an acceptable level.

<u>Comment</u>: The proposed rule cites the systems approaches used for Unshu oranges from Japan, peppers from Israel, tomatoes from Spain, citrus from Florida and Texas, apples from Washington, and stonefruit from California. These systems were put into place after multiple years of data collection and analysis. The approach found in the proposed rule, on the other hand, is based on barely a year's worth of data that is flawed and generally incomplete; the systems approach is being offered as a substitute for obtainable knowledge. APHIS holds its domestic growers and trapping programs to a high standard of quality; it is certainly reasonable to expect that an import program of this magnitude be based on solid, supportable, long-term data.

Response: To characterize the systems approach for avocados as being the product of "barely a year's worth of data" in contrast to other programs that were put in place after multiple years of data collection and analysis is inaccurate. Mexican government and industry

officials have been actively seeking permission to export avocados to the United States since the early 1970's; the importation program established by this final rule is based on data collected during those years, as well as on information gathered by APHIS through its own activities and research. We believe that the Mexican data, supplemented by our own data collected over those years, is of sufficient quality and quantity to provide the foundation upon which to base the safeguards found in this final rule.

<u>Comment</u>: Much is made about the fact that the nine mitigating measures are designed to "individually and cumulatively reduce the risk of pests." However, four of the nine measures (trapping and field treatments, host resistance, post-harvest safeguards, and winter shipment) are specifically designed to control fruit flies. The remaining five safeguards do not act cumulatively to adequately address the threats posed by the seed weevil and other avocado-specific pests.

Response: First, we believe that winter shipment is a mitigating measure that has an effect on pests other than fruit flies because the avocado stem and seed pests, like the fruit flies, would not survive winter temperatures in the northeastern United States. More importantly, however, we disagree with the commenter's assertion that the safeguards do not have a cumulative effect on reducing the risk of the avocado seed and stem pests. Those safeguards determine whether the pests are present (field surveys), deny the pests opportunities to establish a presence (field sanitation), ensure that pests have not infested the avocado fruit (packinghouse inspection and fruit cutting, port-of-arrival inspection), and deny the pests the opportunity to become established in the United States should they somehow get in (limited U.S. distribution, winter shipping). Those six safeguards are each an individual means of detecting or preventing the presence of pests; together, we believe they will reduce the risk of pest introduction to an insignificant level.

<u>Comment</u>: A verification process for the systems approach must be put in place so we can tell if the program is being followed and if the program is effective.

Response: We believe that the necessary checks are already built into the process to allow us to determine whether the program is being followed. Throughout the growing, packing, and shipping processes, APHIS personnel will be on hand to monitor compliance with the regulations and to conduct sufficient inspections to determine the phytosanitary condition of the fruit. That monitoring and inspection will allow us to tell if the program is being followed and is effective.

<u>Comment</u>: APHIS' experience with the failed program to import Sharwil avocados from Hawaii should show APHIS that reliance on the assumed non-host status of a commodity and on systems approaches can result in little to no actual phytosanitary security.

Response: The Hawaiian Sharwil avocado program might be considered to have been a failure from a commercial perspective if one was interested only in moving Sharwil avocados from Hawaii to the mainland, since the program was canceled following the detection of pests on the avocados. From a quarantine perspective, however, the program could accurately be described as a success because the safeguards built into the program allowed us to detect the presence of pests and terminate the program before those pests could be disseminated into the continental United States. In terms of the pest/commodity interaction, the situation in Hawaii differs from the situation in Michoacan. The primary pest of concern for the Sharwil program was the Oriental fruit fly, which is present at very high levels in Hawaii's avocado production area. Oriental fruit fly utilizes a variety of host fruits and will attack almost anything that is available due to its high population density. The situation in Michoacan is not comparable because Anastrepha spp. fruit flies are not present at high population levels in the export orchards and, when compared to Oriental fruit fly, Anastrepha spp. fruit flies have a restricted host range.

<u>Comment</u>: The risk management analysis describes the proposed program as a systems approach consisting of nine mitigation measures used to bring the identified pest risk to an acceptable level. However, only the required field sanitation and fruit fly treatments actually

qualify as mitigation measures; the remaining components -- trapping, fruit cutting, visual inspection, etc. -- are in actuality monitoring tools. The proposed approach, therefore, would be more accurately (and more credibly) described as a process for monitoring the efficacy of cultivation, sanitation, and treatment procedures to allow for and attest to the movement of uninfested fruit only. Such an approach is not invalid, but it should be properly characterized in the final report.

Response: Although field sanitation and fruit fly treatments are the only two components of the systems approach that have a direct effect on the field populations of pests, we believe that all nine components can appropriately be characterized as mitigating measures because what is being mitigated is the risk that an infested shipment of avocados will enter the United States and result in pests becoming established in this country. That risk can be mitigated by monitoring the efficacy of cultivation, sanitation, and treatment procedures to allow for and attest to the movement of uninfested fruit as well as through field sanitation and fruit fly treatments.

### Commercial Shipments

<u>Comment</u>: The proposed rule would require the avocados to be imported in commercial shipments only, but fails to define the term "commercial shipment."

Response: The background information of the proposed rule draws a distinction between commercial shipments and wild or "backyard" avocados, explaining that the two categories of produce are grown under very different conditions. The term is not defined in the proposed rule, however, largely because a definition for the term is already present in the regulations. Specifically, the following definition of the term commercial shipment appears in § 319.56-1 of the regulations (and thus applies to the regulations set forth in this final rule): "A shipment containing fruits and vegetables that an inspector identifies as having been produced for sale and distribution in mass markets. Such identification will be based on a variety of indicators, including, but not limited to: quantity of produce, type of packaging, identification of grower or packing house on the packaging, and documents consigning the shipment to a wholesaler or retailer."

Comment: The proposal requires that trucks transporting avocados from the packinghouse be sealed, but no mention is made as to where or by whom the seal may be broken. It appears, then, that a truck could be loaded with 500 boxes of avocados at a certified packing house, sealed, then be driven to a mango packinghouse, reopened, and the rest of the truck loaded with mangos or some other produce item. The truck then could be driven to the border crossing at Nogales, AZ, for avocado inspection. From Nogales, the mangos could be shipped to California or some other southwestern State and the avocados shipped under U.S. Customs bond on to the northeast. If the avocados contained any pests, they could easily transfer to the other product and be shipped anywhere.

Response: We intend that the refrigerated truck or refrigerated container in which the avocados are transported be sealed at the packinghouse and not opened until it reaches the United States. Mixed loads such as those envisioned by the commenter will not be permitted. The language in the regulations is not, as the commenter noted, clear on those points, so in this final rule we have added language to § 319.56-2ff(c)(3)(viii) to make it clear that the truck or container must remain unopened until it reaches the U.S. port of first arrival. Seasonal Restrictions

<u>Comment</u>: The proposed rule states that the avocados may be imported from November through the month of February. Under proper storage conditions, wholesalers and distributors can hold avocados for several weeks past the end of February. Will businesses be required to dispose of their Mexican avocado inventory come March 1st?

Response: The November through February restriction applies to the importation of Mexican avocados, not to their distribution in the approved States. Under the provisions of the proposed rule, for example, a truckload of avocados could cross the border on the last day of February, take several days to arrive at a market in an approved State, and be first offered for

sale by a wholesaler or distributor in early March. Therefore, businesses will not be required to dispose of their Mexican avocado inventory on March 1st of each year.

<u>Comment</u>: With controlled-atmosphere storage, Mexican avocados imported at the end of February could theoretically be sold into the month of April, when temperatures in some of the approved States could be high enough to enable pests to become established. Therefore, imports should be allowed only until mid-January to ensure that the temperatures in the approved States at the end of the retail sales period -- not just the end of the importation window -- are low enough to preclude the survival and establishment of the pests of concern.

Response: Even with some type of controlled-atmosphere storage, we do not believe it is likely that the shelf life of the Mexican-origin avocados could extend into the month of April. Even if one of the pests of concern were to infest the fruit, avoid detection, survive shipment, and finally escape into the environment during a period of mild weather, there would be no host material available to sustain a pest population.

# <u>Distribution Within the United States</u>

<u>Comment</u>: The proposed requirement for boxes in which the avocados are shipped to be marked "Distribution limited to the following States: ..." will be meaningless as a deterrent to transshipment; persons wishing to transship the avocados can easily repack the fruit in other boxes. At the very least, APHIS should require that each individual Mexican-origin avocado be marked with an indelible dye or bear a sticker denoting its origin.

Response: We agree with the numerous commenters who made this point and have added a stickering requirement to this final rule. Specifically, we will require that each avocado fruit be labeled with a sticker bearing the Sanidad Vegetal registration number of the packinghouse in which the avocado was prepared for shipment to the United States. We believe this stickering requirement will make it easier to identify Mexican-origin avocados at terminal markets and present an additional obstacle to transshipment of the fruit to non-approved States.

<u>Comment</u>: The limited distribution scheme is an unrealistic concept, given the open nature of the U.S. marketing and transportation systems. The restrictions will be ignored because of high consumer demand for avocados in areas outside the approved States and the price disparity between California and Mexican avocados. The price disparity will be even greater when the \$0.054 per-pound tariff cited in the proposed rule is eliminated.

Response: If the limited distribution requirement was the only means of risk mitigation available in the Mexican avocado import program, the open nature of the U.S. marketing and transportation systems would be a matter of concern. Limited distribution is, however, only one of a series of safeguards designed to prevent the introduction of pests into the United States through the importation of avocados from Mexico. We do not expect limited distribution to be foolproof, but we also do not expect that infested avocados will be entering the United States through legally imported commercial shipments in the first place. Further, we anticipate that unscrupulous distributors will be the exception, rather than the rule, so we believe that the restrictions on distribution of the avocados will be widely observed, rather than ignored. As an earlier commenter pointed out, domestically grown avocados are certainly available during the period when Mexican avocados will be imported, so the high consumer demand anticipated by the commenter in non-approved States could be met by domestic supply and by those avocados that are already being imported to all regions of the United States from Chile, the Dominican Republic, and the Bahamas.

With regard to the expected price differential between imported Mexican-origin avocados and domestic avocados, the commenter is correct in noting that the \$0.054 per pound tariff will be eventually eliminated. Under the North American Free Trade Agreement, all fees and tariff rates on Schedule C commodities, including avocados, are to be eliminated within 10 years, with a gradual decline of 10 percent per year. Whether or not the price differential will give rise to a black market for avocados or lead established distributors to knowingly violate the law for the sake of profit is another matter. An unscrupulous distributor who wished to illegally transship Mexican avocados would have to pay the costs associated with obtaining a shipment

of imported Mexican avocados at wholesale prices from a terminal market in an approved State, moving that shipment to a secure location, unloading the boxes from the truck or container, removing all the avocados from their packing boxes, peeling the sticker from each piece of fruit, perhaps adding a new sticker to each piece of fruit, repacking the fruit in new boxes, loading the boxes back onto the truck or container, and driving the load of avocados across the country to one of the expected high-demand markets (south Florida, Texas, and California), all of which would limit the profitability of such an illegal enterprise. We believe that this limited profit potential, when combined with other factors such as the ready availability of domestic and imported avocados in areas outside the approved States and the fact that persons involved in such illegal transshipment are liable to legal action, incarceration, or fines, makes it unlikely that large-scale transshipment will take place.

<u>Comment</u>: In the risk documents and the proposed rule, APHIS asserts that the Fruit and Vegetable Division of the Agricultural Marketing Service (AMS) would notify APHIS if Mexican-origin avocados showed up at terminal markets in non-approved States. The AMS would be in no position to render such assistance because their responsibility is to grade fruits and vegetables for export.

Response: The AMS does grade domestically marketed fruit, as well as fruit intended for export, so AMS personnel will indeed be present at terminal markets in non-approved States and will thus be in a position to assist APHIS in identifying misdirected avocados.

<u>Comment</u>: In the risk documents and the proposed rule, APHIS asserts that the AMS would notify APHIS if Mexican-origin avocados showed up at terminal markets in prohibited States. How will AMS personnel -- or APHIS inspectors -- be able to tell the difference between Mexican-origin Hass avocados and Hass avocados that originated in domestic groves or were imported from Chile?

Response: Domestically grown Hass avocados and Hass avocados imported from Chile will be clearly labeled and readily identifiable, since there is no reason for a distributor or other person to disguise their origin. Similarly, the Mexican avocados will be packaged and individually labeled to indicate that they originated in Mexico, so a person wishing to sell transshipped Mexican avocados in a terminal market in a non-approved State would have to go to some lengths to disguise the origin of the fruit. As discussed in the response to a previous comment, we do not believe that the level of profit that might be expected from selling transshipped Mexican avocados would be great enough to entice a significant number of people to engage in such illegal activity.

<u>Comment</u>: The commissioner of agriculture in one State and the governor of another have noted that consumers, processors, and distributors in their States have expressed interest in the availability of Hass avocados from Mexico and would like to see the list of approved States expanded to include their respective States.

Response: The placement of additional States on the list of approved States would have to be part of a subsequent rulemaking. The public must be given an opportunity to comment on the inclusion of additional States, and importations into the non-approved States were not considered in the supplemental pest risk assessment and risk management analysis prepared for July 1995 proposed rule, so we do not have sufficient information regarding the potential plant pest risk associated with importing Mexican avocados into other States. New States may be added in the future if APHIS receives a request to do so and the agency determines that avocados can be imported into that State without presenting a significant pest risk; if such a determination is made, a proposed rule to add the State would be published in the Federal Register.

<u>Comment</u>: Part of the rationale behind APHIS' limited distribution safeguard is the contention that there is no suitable host material to sustain the pests of concern, especially the avocado-specific pests. There is, however, the possibility that the avocado seed weevils and the avocado seed moth could become established in the northeastern United States by using red bay (<u>Persea borbonia</u>), a relative of avocado (<u>Persea americana</u>), as a host. Red bay is a host of

Heilipus apiatus, which is closely related to the large avocado seed weevil Heilipus lauri.

Response: Although H. apiatus is related to H. lauri, H. apiatus is a stem borer, not a seed pest. It is very unlikely that H. lauri, Conotrachelus aguacatae and C. perseae could survive by feeding on the small seeds of red bay (fruit size 1-2 cm.). In addition, the seed moth is found only at lower elevations in the tropics, even though the host is grown commonly at higher elevations. In fact, all of the pests of concern become rare or are completely absent at the higher elevations. Although specific temperature threshold information for these pests may be scarce or absent, there is no reason to believe that these tropical or subtropical pests could survive the winters in the approved States.

Trust Fund Agreement and APHIS Participation

<u>Comment</u>: APHIS and Mexico need to recognize that APHIS is neither adequately staffed nor funded to properly deal with this proposed importation program. This limitation could be waived if all APHIS incurred costs were borne by Mexico.

Response: The proposed rule clearly stated that all costs associated with APHIS' participation in the program would be paid by the Mexican avocado industry association through a trust fund agreement with APHIS. Paragraph (b) of proposed § 319.56-2ff stated, in part, that the Mexican avocado industry association would be required to "pay in advance all costs that APHIS expects to incur through its involvement in the trapping, survey, harvest, and packinghouse operations..." Those provisions are the same in this final rule. The costs of inspecting imported agricultural commodities at the port of first arrival are recovered, when applicable, by user fees.

<u>Comment</u>: The Mexican avocado growers should be required to post a bond or to somehow insure or indemnify their product, so that in the event of a pest infestation, domestic avocado growers would receive some financial compensation for their losses.

Response: We believe that requiring Mexican growers to somehow indemnify their product would be unnecessary and ill-advised, largely because no country in the world requires the indemnification of agricultural products offered for importation; if the United States were to set a precedent and require such indemnification, it would be only a matter of time before our domestic agricultural producers would be required to indemnify their products offered for export. Any grower or farmer has little control over his or her produce once it has left the grove or farm, let alone once it has been exported to another nation. To ask that grower or farmer to insure his or her produce from the farm gate to the end consumer would be unfair at best, especially in this instance, given that the regulations prohibit the distribution of Mexican Hass avocados in U.S. avocado-growing States. Finally, requiring such indemnification would run counter to our obligations under current international trade agreements and would certainly be subject to challenge by Mexico and other potentially affected trading partners. Safeguards in Mexico

<u>Comment</u>: Why does Sanidad Vegetal, an agency of the Mexican national government, have to hire, train, and supervise the personnel who will be involved in trapping and conducting the pest surveys? Mexico does not require the USDA to hire, train, and supervise the personnel engaged in similar activities in California or Washington, for example. Mexico accepts the results provided by State-level personnel, as should APHIS.

Response: The commenter is correct in pointing out that Mexico -- and many other countries as well -- accepts the plant-health-related work performed in the United States by State personnel. We have, therefore, modified the regulations in this final rule to allow the personnel who conduct the trapping and pest surveys in Michoacan to be hired, trained, and supervised either by Sanidad Vegetal, as was proposed, or by the Michoacan State delegate of the Secretaria de Agricultura, Ganaderia y Desarrollo Rural (Secretariat of Agriculture, Livestock, and Rural Development), who holds a position that is roughly equivalent to that of a State agriculture commissioner in the United States.

<u>Comment</u>: The supplementary pest risk assessment states that "any proposed program would include...field surveys for specific avocado pests at the State, municipality, and grove

levels," but the area surveys called for in the proposed rule appear to be only at the municipality and grove levels.

Response: The reference to State-level surveys in the supplementary pest risk assessment was an error. State-level surveys were not part of the Mexican work plan, nor were they considered in the risk management analysis or the proposed rule. More importantly, however, no estimates of risk or risk reduction were based on the expectation that State-level surveys would be conducted. We believe that the required municipality- and grove-level surveys, which focus on detecting pests in the production areas, will provide us the necessary pest population information.

<u>Comment</u>: The supplemental pest risk assessment states that one factor in the assessment that affects risk management is the assumption that all traces of stems and other plant material would be removed from the avocados before packing. The proposed regulations, however, do not mention removing stems.

Response: The statement to which the commenter is referring can be found on page 8 of the supplemental pest risk assessment. Freedom from stems and other kinds of plant material is one of the "Quarantine 56 conditions" that the risk assessment assumes will be in effect, which is indeed the case. Paragraph (a) of § 319.56-2 requires that "all importations of fruits and vegetables must be free from plants or portions of plants, as defined in § 319.56-1." Plants or portions of plants is defined as "leaves, twigs, or other portions of plants, or plant litter or rubbish as distinguished from clean fruits and vegetables, or other commercial articles." We have added language to the packinghouse requirements in § 319.56-2ff(c)(3) to make it clear that stems, leaves, and other portions of plant must be removed from the avocado fruit.

<u>Comment</u>: The proposed rule calls for dead branches to be pruned and removed from the orchards, but provides no set schedule for those actions to occur. Without a more precise schedule, the practice may not effectively prevent stem weevil infestations. Tree pruning should be timed to remove dead or dying branches before adult stem weevil emergence in the spring or the fall. Spring removal and destruction of dead or dying branches would help to break the reproductive cycle and reduce the population level of any adult stem weevils that may be present in those orchards.

Response: No prescribed schedule was included because we intend for the removal of dead branches to be a continuing part of an orchard's management and upkeep. The regulations in this final rule require, as was proposed, that "[d]ead branches on avocado trees in the orchard must be pruned and removed from the orchard." That requirement is one of the conditions under which any approved orchard must operate.

<u>Comment</u>: The proposed rule calls for avocado fruit that has fallen from the trees to be removed from the orchards prior to harvest. Given the fact that such fruit is more likely to be infested by pests, removal of fallen fruit should be part of a regular field sanitation routine, not merely be a pre-harvest event.

Response: We agree that removing fallen fruit as a regular practice would lower the risk of fruit fly attraction within an orchard and would thereby lower the overall fruit fly population in an orchard. Therefore, we have changed § 319.56-2ff(c)(2)(iii) in this final rule to require that fallen fruit be removed from export orchards at least once a week.

<u>Comment</u>: It will be all but impossible for the registered growers in Michoacan to patrol their approved orchards often enough to remove all the avocado fruit that has fallen from the trees prior to harvest, and it is unrealistic to expect that pickers who are paid by the bin or by the pound will not place fruit from the ground into their field boxes during the harvest, thus increasing the risk that infested avocados will be exported to the United States. How will APHIS enforce these requirements?

Response: Although it is unlikely that any orchard could ever be kept completely free of fallen fruit, we believe that it is possible for a grower to keep up with most of the fallen fruit by following sound field sanitation practices. As noted in the response to the previous comment, we will require that fallen fruit be removed from the orchard on a weekly basis,

rather than just before harvest. Because a finding of infested fruit will result in the suspension or withdrawal of an orchard's export certification, it is in a grower's best economic interests to prevent fallen fruit from being intermingled with harvested fruit. Inspections at the packinghouse prior to and during the culling process, along with subsequent inspections in the United States, are expected to alert us to the presence of pests, and frequent checks by APHIS and Sanidad Vegetal inspectors will help ensure that the requirements of the regulations are being observed.

<u>Comment</u>: It is highly unlikely that avocados in the approved orchards could be harvested by pickers, dumped into bins or other containers, loaded onto trucks, and covered in less than 3 hours after being picked. It is more likely that the fruit will be exposed for longer periods of time and thus exposed to potential fruit fly infestation. How will APHIS be able to supervise these requirements?

Response: We acknowledge that a grower may not be able to transport all his avocados to the packinghouse within 3 hours of harvesting them, so there are provisions for protecting the fruit until it is moved. Specifically, the regulations in this final rule require, as was proposed, harvested avocados to be "moved from the orchard to the packinghouse within 3 hours of harvest or they must be protected from fruit fly infestation until moved." APHIS inspectors and Sanidad Vegetal personnel will be monitoring the export groves during harvest and will ensure that these and all the other requirements of the regulations are met.

<u>Comment</u>: The Mediterranean fruit fly (Medfly) has been found at high levels in the Mexican State of Chiapas, which is close to the State of Michoacan. In order to monitor potential Medfly movement into the Michoacan region, monitoring for Medfly at a higher trap density than called for in the proposed rule is needed.

Response: Given the history of Medfly's spread and the spread of other fruit flies, we believe that Medfly is unlikely to migrate the 650 miles from Chiapas to Michoacan. The trapping densities and trap types required in this final rule for Medfly monitoring in Mexico are the same as those used to monitor for Medfly in California, where much of the State's fruit production area lies within 650 miles of the recent Los Angeles Basin infestation.

<u>Comment</u>: Field surveys are defined by APHIS as the most effective safeguard for protection against avocado-specific pests, but these surveys rely almost exclusively on programs under the direction of Sanidad Vegetal. If this is to be the most effective line of defense against the introduction of the seed weevil, APHIS should be directly involved in implementing this program and not merely monitoring the process.

Response: With regard to the required safeguards, including field surveys, the regulations in § 319.56-2ff(c) clearly state that "APHIS will be directly involved with Sanidad Vegetal in the monitoring and supervision of those activities." APHIS personnel will be present in Michoacan in a supervisory and monitoring capacity to ensure that the required safeguards are being observed, not to conduct field surveys for the Mexican avocado industry. Municipality Requirements

<u>Comment</u>: A survey should be required for the avocado seed moth, and sex lure or food bait traps should be used to monitor for the avocado seed moth.

Response: In this final rule, as in the proposed rule, the regulations in § 319.56-2ff(c)(1)(ii) require that each municipality be surveyed at least annually for the avocado seed moth and the other avocado seed pests. A sex lure or food bait is not available for use in trapping for the avocado seed moth, but we continue to believe that the annual survey required by the regulations will serve to alert us to the presence of this and other pests in the municipalities, and that the other safeguards in the regulations will ensure that shipments of avocados will be free of the pests of concern.

<u>Comment</u>: The proposed regulations call for at least 300 hectares of each municipality to be surveyed for seed weevils and seed moths at least annually. While the proposal states that "portions" of each registered orchard and areas with wild or backyard avocado trees must be included in the survey, the term "portions" is not defined and is, thus, open to interpretation.

Additionally, there is no explanation of how a 300-hectare survey per municipality will yield a 95 percent confidence level of detection. How can a single annual survey of 300 hectares serve as the basis for calling a municipality free of seed weevils and seed moths?

Response: We did not specify a minimum size for the "portions" to be surveyed because the survey must include portions of each registered orchard and areas with wild or backyard avocado trees, and the number of those areas will vary between municipalities. However, the work plan in which Sanidad Vegetal will set forth the details of the survey activity will have to be approved by APHIS, and APHIS personnel will be supervising the surveys, so we will be able to ensure that Sanidad Vegetal continues its current practice of reflecting the size of an orchard in the size of the surveyed area, i.e., surveying larger orchards more widely than smaller orchards. The overall survey size of 300 hectares per municipality was selected to ensure that there would be a 95 percent or greater confidence level, independent of the size of the municipality, that the survey would detect the pests if they occur in 1 percent or more of the commercial growing areas within the municipality. The only way to approach a 100 percent confidence level would be to survey every tree, which is not practical. It should be noted that the municipality must be found free of the avocado seed pests -- i.e., none found during the entire 300-hectare survey -- and that the survey must be conducted during the growing season and prior to the harvest of the avocados. The nature and timing of this annual survey offers a high degree of assurance that the avocados exported to the United States will be free from avocado seed pests.

<u>Comment</u>: Field survey is a critical element. The survey protocol is set up to have a 95 percent confidence level of finding 1 percent infestation; this assumes an evenly distributed infestation, not the more likely scenario of certain groves being more likely infested than others and a spotty distribution of weevils within an infested grove.

Response: We believe that the field surveys required by the regulations, which will be supervised by APHIS, are already designed to address the uneven distribution thought likely by the commenter. The required surveys will include each registered orchard, so every grove from which avocados will be exported to the United States will be inspected; areas with wild or backyard avocados trees will be surveyed as well. Within each registered orchard, the APHIS personnel supervising the surveys will ensure that the survey sites are randomly selected to provide a reliable means of detecting uniform or spotty distributions of pests within each orchard. (To make that requirement clear, we have added the words "randomly selected" to § 319.56-2ff(c)(1)(ii) in this final rule to describe the selection of survey sites within each orchard.)

<u>Comment</u>: The proposed regulations call for at least 300 hectares of each municipality to be surveyed for seed weevils and seed moths at least annually. Have any of those surveys been conducted yet? APHIS should have conducted its own survey to determine the municipalities to be free of the avocado seed pests and fruit flies before publishing the proposed rule.

Response: Seed pest surveys have been conducted routinely by Sanidad Vegetal for its own programs over the past several years, but the surveys called for by the regulations have not been conducted yet because Sanidad Vegetal and APHIS do not know which municipalities and orchards will register to participate in the avocado export program. When the work plan is submitted and the participating municipalities and groves are identified, APHIS will be directly involved with Sanidad Vegetal in the monitoring and supervision of the surveys. Sanidad Vegetal Avocado Export Program

<u>Comment</u>: APHIS claims in the proposed rule that over 5 million kilograms of avocados have been exported to Japan during the last 3 years under the Sanidad Vegetal Avocado Export Program with no recorded interceptions of the 8 pests of concern. APHIS failed to mention, however, that one quarter of all Mexican avocado shipments to Japan were fumigated after live pests were discovered. In addition, the Japanese inspectors do not routinely cut fruit as part of their inspection process. Finally, Japan and the other countries to which

Mexican avocados are exported do not have domestic avocado industries, so there is significantly less risk for those countries from the start.

Response: It is Japanese plant protection policy to fumigate an imported commodity from any country when any live organism is found -- regardless of the organism's quarantine or pest status -- so it is not accurate to characterize the fumigation of Mexican avocados by Japan as being solely in response to the detection of live pests. What is of primary importance is the fact that the Japanese have not detected the presence of any of the eight pests of concern to APHIS. APHIS did not claim that Japanese plant protection officials cut fruit as part of their routine inspection. The Japanese have sampled and carefully examined approximately 50,000 avocados over the last 3 years, cutting the fruit if external signs of pests indicate the need to do so. Finally, there is less risk posed to a country without a domestic avocado industry, but only in terms of avocado-specific pests; such a country would still seek to identify and mitigate, as necessary, the risks presented by other pests such as Anastrepha spp. fruit flies. Orchard and Grower Requirements

<u>Comment</u>: Under the proposed regulations, APHIS would allow an orchard to continue shipping even after more than one <u>Anastrepha</u> spp. fruit fly is discovered during a 30-day period, provided malathion bait sprays were applied. The proposed rule states that this protocol is similar to those used in Texas and Florida; however, Florida orchards are eliminated from their export program if two Caribbean fruit flies are discovered in an orchard. Why is there a disparity?

Response: In the proposed rule, we stated that the procedures for fruit fly trapping, increased trapping in response to a fruit fly detection, and pesticide treatments in response to additional detections in the Mexican avocado program were similar to the procedures used by APHIS in citrus fruit production areas of Florida and Texas where Anastrepha spp. fruit flies exist. The similarities can only carry so far, however, when there are differences in the pest of concern, the susceptibility of the commodity to infestation, or both. Accordingly, the program response to the capture of Caribbean fruit flies (Anastrepha suspensa) in a Florida citrus grove differs from the program response for the capture of Anastrepha ludens, A. serpentina, or A. striata in a Mexican avocado grove. APHIS believes that the systems approach used in each case, although different, adequately reduces the risk to an insignificant level in their respective pest situations.

<u>Comment</u>: The proposed regulations would require trapping for <u>Anastrepha</u> spp. fruit flies throughout the year in production areas. Research shows that Hass avocados are not fruit fly hosts; therefore, trapping for fruit flies should not be required in avocado production areas. If the requirement is maintained, Mexican avocados should be allowed entry into the United States without seasonal or geographic restrictions.

Response: We disagree with the commenter's contention that fruit fly trapping is unnecessary. Although we do believe that Hass avocados still on the tree are non-preferred hosts for Anastrepha spp. fruit flies, we nonetheless believe that it is prudent to require trapping in the production areas to allow us to monitor the population levels of the fruit flies. Significant increases in fruit fly populations in the production areas would increase pest pressure on the avocados, which would necessitate a reassessment or adjustment of the program's fruit fly risk mitigation measures. We continue to believe that the fruit fly trapping, along with the seasonal and geographic restrictions and the other elements of the program, are necessary to provide for the safe importation of avocados from Mexico.

<u>Comment</u>: The <u>Anastrepha</u> spp. trap density of 1 trap per 10 hectares is too low for effective monitoring. The biological reality is that adult fruit flies would move between various hosts in the region as different hosts become more or less attractive for oviposition. A proper regional trapping program should be established that includes buffer areas around orchards. Also, the attraction range of McPhail traps is small -- a few feet or meters -- compared to other trap types. Relying on traps of this type and trap densities at this low a level could allow fruit fly population levels to increase significantly without detection.

Response: The Anastrepha spp. fruit fly trapping is intended to indicate whether fruit fly populations are present in production areas, rather than in areas where wild or alternative host material may be grown, which is why the trapping is to be conducted in the orchards. We believe that the required trap density of 1 trap per 10 hectares will be sufficient to indicate the presence of fruit fly populations in the orchards. In the United States, the national detection protocol for Anastrepha ranges from 1 trap per 10 square miles to 5 traps per square mile; the Rio Grande Valley and Florida citrus protocol for Anastrepha ranges from 5 to 15 traps per square mile. The density required in the Mexican orchards -- 1 trap per 10 hectares -- works out to approximately 25 traps per square mile, which is the same density required to maintain the fruit-fly-free zone in the Mexican State of Sonora. With regard to the type of traps used, we believe that some of the other traps currently available may be comparable to the McPhail trap, but none are better for monitoring for Anastrepha fruit flies.

<u>Comment</u>: Field trapping data can, and likely will, be modified to get the "right" answer.

Response: APHIS will be directly involved with Sanidad Vegetal in the monitoring and supervision of all required activities in Mexico, including the trapping. We believe this routine supervision and monitoring will discourage any tampering with trapping data, especially considering that an orchard or even an entire municipality could be subject to suspension or expulsion from the export program if caught falsifying trapping data. Further, trained APHIS personnel will be present in the municipalities, orchards, and packinghouses throughout the growing season and harvest and would thus be in a position to notice the discrepancies between falsified data and actual conditions.

<u>Comment</u>: The proposed regulations call for certain actions to be taken if a fruit fly is trapped in an orchard, but the protocol for the number of malathion treatments to be used and when export shipments could be resumed in relation to fruit fly finds is unclear. Additionally, nothing is said with regard to actions that would be taken in the event of fruit fly larvae being found in avocado fruit.

Response: As stated in the proposed rule and in this final rule, the trapping of a single fruit fly in an export orchard will require the deployment of at least 10 additional traps in the 50-hectare area surrounding the trap in which the fruit fly was found, and any additional finds within 30 days in the 260-hectare area surrounding the first find will necessitate the application of malathion bait treatments in the affected orchard in order for the orchard to remain eligible to export avocados to the United States. Exports from the orchard would not be suspended based on fruit fly finds alone, so the resumption of export shipments in relation to fruit fly finds is not addressed in the regulations. If, however, the grower failed to apply malathion bait treatments when required, the orchard would lose its export certification and the grower would have to regualify for that certification before exports from the orchard could resume. The specific protocol for the number of malathion treatments that would have to be applied in the orchard is not spelled out in the regulations; rather, the applicable protocols would be detailed in the annual work plan prepared by Sanidad Vegetal and approved by APHIS that details the activities that Sanidad Vegetal will carry out to meet the requirements of the regulations. The detection of fruit fly larvae in avocado shipments at the packinghouse or during subsequent inspections will automatically result in the rejection of the infested shipment based on its failure to meet the requirement for freedom from pests and will trigger an evaluation of the export program.

Comment: Under the proposed regulations, APHIS would allow an orchard to continue shipping even after more than one Anastrepha spp. fruit fly is discovered during a 30-day period, provided malathion bait sprays were applied. The discovery of additional flies found within 1 month, or preferably one life cycle, should require, in addition to malathion and bait treatments, the suspension of any exports until 30 days or, again, preferably one life cycle, has passed with no new detections. This would help assure that any fruits that might contain fruit fly eggs or larvae are not shipped.

<u>Response</u>: We believe that the poor <u>Anastrepha</u> host status of Hass avocados, along with the application of malathion bait treatments, increased trapping, lower wintertime fruit fly activity, and the required post-harvest safeguards makes it unnecessary to suspend exports from a grove based on the trapping of more than one fruit fly within a 260-hectare area centered within the grove.

## Packinghouse Requirements

<u>Comment</u>: The proposed rule would require 250 avocados per shipment to be selected, cut, and inspected at the packinghouse prior to the culling process. To reach a 95 percent confidence level of detecting a 1 percent infestation rate, at least 300 avocados should be inspected.

Response: We agree with the commenter. Depending on the size of the fruit and the number of field boxes, the size of a shipment could range between 1,000 and 4,000 avocados; hypergeometric tables indicate that the sample size needed to reach the 95 percent confidence level of detecting a 1 percent infestation would vary between 258 and 288 fruit. Therefore, we have changed the required sample size in § 319.56-2ff(c)(3)(iv) to 300 fruit.

Comment: No size is given for a "shipment," yet the proposed regulations say to cut 250 fruit per shipment in the packinghouse prior to the culling process. With a large shipment, cutting 250 fruit could yield a near-zero confidence level of detecting 1 percent or greater infestation. Sample size must bear some relationship to the total lot size.

Response: As noted in the previous response, the size of a shipment could vary between 1,000 and 4,000 avocados, and hypergeometric tables indicate that a sample size of 288 avocados would be sufficient to detect a 1 percent infestation in a shipment of 4,000 avocados with 95 percent confidence. Because we will require 300 avocados to be sampled from each shipment, and because increasing the sample size above that level will not significantly increase the statistical probability of detecting a 1 percent infestation, we have not made any changes in response to that comment.

<u>Comment</u>: It is not unreasonable to expect that some growers in Mexico will take avocados from non-certified groves to a certified grove or an export packinghouse and attempt to pass the avocados off as having been grown in a certified grove. What safeguards will be in place to prevent this from happening?

Response: As stated in the proposed rule and in this final rule, a finding of any of the avocado seed pests Heilipus lauri, Conotrachelus aguacatae, C. perseae, or Stenoma catenifer in a municipality during an annual pest survey, orchard survey, packinghouse inspection, or other monitoring or inspection activity will result in the municipality's loss of its pest-free certification and the suspension of avocado exports from that municipality until APHIS and Sanidad Vegetal agree that the pest eradication measures taken have been effective and that the pest risk within that municipality has been eliminated. Similarly, a finding of the stem weevil Copturus aquacatae during an orchard survey or in a packinghouse will result in an orchard losing its export certification for the entire shipping season of November through February. Because avocado fruit from non-certified groves presents a greater pest risk than does fruit grown in certified groves, we believe that it is unlikely that the growers and packers in an approved municipality would allow their entire export operation to be jeopardized by allowing potentially infested fruit from non-certified orchards to be commingled with their export-quality fruit. In addition to that purely economic disincentive, APHIS and Sanidad Vegetal inspectors will also be present in the municipalities, orchards, and packinghouses during the shipping season to ensure that all requirements of the regulations are being observed.

<u>Comment</u>: It will be difficult for inspectors in packinghouses or at the border to detect the presence of stem weevils in avocados once the fruit has been washed because washing removes the white residue or "sugaring" that is found on the fruit when stem weevils are present.

Response: Under the inspection system contained in the proposal and in this final rule, packinghouse inspection would occur after the fruit has been removed from the field boxes and

before the fruit has been washed, so any white residue would still be visible. However, detecting the presence of stem weevils after washing is also possible with proper training, as is evidenced by the hundreds of instances in which APHIS inspectors at the El Paso, TX, border crossing have detected the pest in avocados confiscated from smugglers. Shipping Requirements and Restrictions

<u>Comment</u>: Illinois should be eliminated from the list of approved States because of the large number of terminal markets in Chicago that regularly ship produce to unapproved States. It would be too difficult to prevent Mexican avocados from being shipped to unapproved States from Chicago.

Response: The fact that a distributer in one State may deal with a distributor in another State was not a significant consideration in the compilation of the list of approved States. Certainly, any distributor in any State who was determined to transport avocados outside of the approved States could likely do so, be he in Maine or Illinois. Illinois and the other approved States were requested as markets by Mexico because the cold winter climate and general unsuitability to tropical pest infestation of those States offered an additional safeguard for the proposed export program, reasoning with which APHIS agreed. Distributors in States on the southern and western periphery of the approved area are likely to deal with customers in neighboring States; if those States were eliminated from the list of approved States, we would simply be left with another group of States that border on non-approved States.

<u>Comment</u>: Ports of entry in Texas should not be limited to those listed in the proposed rule; rather, APHIS should issue permits that would be valid for multiple ports in order to preserve competition.

Response: The Texas ports of entry were selected because they are staffed by APHIS inspectors who are experienced with dealing with avocado shipments. We believe that the seven Texas ports of entry listed in the regulations will be adequate to meet the needs of importers who wish to receive their products through Texas. If there is a demonstrated need for additional ports of entry in Texas or circumstances otherwise warrant the addition of new ports of entry for Mexican avocados, such an addition to the list of ports would have to be proposed as part of a future rulemaking.

<u>Comment</u>: The proposed rule would require the avocados to be moved through the United States by air or in a refrigerated truck or rail car, as temperature is critical to the suppression of these known pests. I would think a temperature recording device showing that the avocados have been held under refrigeration at 40 degrees through the transporting period would be mandatory. I see no reason for a refrigeration requirement without a temperature and temperature recording requirement.

Response: The cooler temperatures in Michoacan and the cold temperatures in the approved States played a role in our assessment of pest risk, but the requirement for refrigerated trucks, containers, or rail cars was not specifically identified as a mitigating measure in the supplemental pest risk assessment or in the risk management analysis. By the time the avocados have entered the United States, keeping the temperature of the fruit low during transport contributes as much to maintaining fruit quality as it does to suppressing possible pest activity. The importer of the fruit would certainly expect that the fruit would be in the best possible condition upon its arrival in an approved State, and the person transporting the fruit would seek to meet that expectation. Therefore, we do not believe it is necessary for APHIS to require that temperature logs be maintained by the person transporting avocados imported into the United States from Mexico.

<u>Comment</u>: How will APHIS ensure that shipments of avocados are not diverted to non-approved States during transit?

Response: The avocados will be required to travel under a bond posted by the importer with the U.S. Customs Service. The bond serves to guarantee that the shipment will be delivered intact to the destination listed on the permit issued for its importation; if the shipment does not arrive at its destination, the fact that the in-bond papers have not been closed out will

serve to notify Customs and APHIS that the permit requirements have been violated. Persons violating the conditions of the permit and the in-bond agreement are liable to forfeiture of the bond and significant civil and criminal penalties.

<u>Comment</u>: The shipping corridor should not extend as far to the north as was proposed; there are too many routes leading west in the northern area of the corridor.

Response: We believe that the routes that lead north and east from El Paso, TX, would likely be used by shippers, especially those with destinations in the western portion of the approved States. As noted in the response to the previous comment, significant penalties can be assessed on shippers who fail to observe the conditions of the permit.

<u>Comment</u>: Nogales, AZ, and El Paso, TX, should be eliminated as ports of entry for Mexican avocados bound for the northeastern United States. These ports are so far west that diversion of shipments to the high-demand California markets would be likely.

Response: Nogales and El Paso are each situated at the northern end of a major north-south Mexican highway and are significant hubs for U.S./Mexican trade. These ports are staffed with APHIS personnel experienced with handling avocado shipments and are currently used as ports of entry for avocados and other restricted products such as citrus fruit and mangoes that are moving through the United States to destinations outside the United States under the plant quarantine safeguard regulations in 7 CFR part 352. The permit and bond agreement under which the avocados will be shipped will clearly delineate the areas through which the avocados may be moved and, as noted in the responses to the previous two comments, significant penalties can be assessed on shippers who fail to observe the conditions of the permit.

<u>Inspection</u>

<u>Comment</u>: Inspection at the port of first arrival is a weak link in the systems approach. Given the risk presented, an inspection scheme of closer to 100 percent would be more appropriate than the current plan.

Response: Inspection at the port of first arrival is intended to accomplish two goals. First, inspectors check the documents accompanying the shipment to ensure that the avocados are from an approved orchard and were processed in an approved packinghouse and are accompanied by a phytosanitary certificate. The inspectors also ensure that the limited distribution statement appears on all boxes, that a U.S. Customs Service bond has been secured for the shipment, and that the in-bond papers indicate that the shipment is consigned to an importer in an approved State. Second, the inspectors will select a sample of fruit from each shipment and carefully cut and inspect those avocados to verify their pest-free status. Inspection at the port of first arrival is essentially a redundant safeguard that serves to verify that all the regulatory requirements applicable to the importation of the avocados have been met.

<u>Comment</u>: Inspections are likely to be negatively impacted by the numbers of boxes coming through.

Response: Given the number of ports of entry and the expected volume of imported Mexican avocados, we do not believe that APHIS inspectors at the ports of entry will be faced with an overwhelmingly large number of shipments. In all cases, shipments of avocados being offered for entry into the United States will be inspected in accordance with the regulations.

<u>Comment</u>: The proposed regulations state that the avocados, upon arrival at the terminal market in the northeastern States, are subject to inspection. I would think an inspection would be mandatory and should reflect temperature and fruit condition on arrival.

Response: As noted in the response to the previous comment, we will inspect all shipments of avocados offered for importation into the United States from Mexico. APHIS personnel are not routinely assigned to terminal markets, so we cannot require that an additional inspection be conducted when the avocados arrive at their destination. Under the Federal Plant Pest Act (FPPA), APHIS does have the authority to inspect the avocados at the port of first arrival, at any stops in the United States en route to the northeastern States, and upon arrival at

the terminal market in the northeastern States; the regulations in § 319.56-2ff(i) reflect that authority.

### Other Comments

<u>Comment</u>: The proposed rule is silent with regard to issues of liability, which is a matter that could affect many businesses. For example, a distributer cannot police the product once it has been sold, but there are distributors in the approved States who routinely do business with customers who operate both inside and outside of the approved States. To the extent that there is potential enforcement action against wholesalers, brokers, and distributors, it should be clear as to the penalties for violating the regulations.

Response: Just as is the case with all apparent violations of APHIS regulations, the Agency's Regulatory Enforcement staff would examine the case and conduct an investigation to ascertain the facts of the case. Subsequent actions could range from warnings to civil penalties to recommendations for criminal prosecution, depending on the facts of each particular case.

<u>Comment</u>: There is a basic conflict of interest between APHIS' new mandate to facilitate international (import) trade and its historical mandate to prevent the introduction and establishment of exotic pests. The proposed rule is biased toward promoting trade to the detriment of pest exclusion and is a clear departure from established APHIS protocols for pests with major potential impact such as Anastrepha spp. fruit flies.

Response: APHIS' primary responsibility with regard to international import trade is now, and has been for many years, to identify and manage the risks associated with importing commodities. Because, as we have already noted, there is no such thing as zero risk in international trade, reducing risk to an insignificant level is the only realistic approach. If there is no practical way to mitigate a particular risk associated with a product, APHIS will prohibit that product's entry into the United States, as is our right under current international trade agreements; we have done so in the past and will continue to do so when warranted. However, when we determine that the risk can be reduced to an insignificant level, it is our responsibility under those same trade agreements to make provisions for the importation of that product. In terms of facilitating trade, APHIS' role is solely in the area of exports, i.e., working to eliminate obstacles to the exportation of commodities produced in the United States. The systems approaches for citrus from Florida and Texas, apples from Washington, and stonefruit from California that we cited in the proposed rule are examples of ways that we have found to answer the pest concerns of our trading partners in order to enable the exportation of domestically grown fruits and vegetables. Just as we seek to open foreign markets to our Washington apples or California stonefruit, however, we must also listen to the requests of other nations seeking to export their products to the United States.

<u>Comment</u>: Will APHIS provide for monitoring and trapping in the United States for the fruit flies and seed pests once Mexican avocados are allowed into the country? Are there procedures for such monitoring?

Response: APHIS already has an established national fruit fly monitoring program in place, and monitoring for certain other exotic pests is conducted by Federal and State agencies participating in the Cooperative Agricultural Pest Survey (CAPS) program. In addition to these formal programs, the day-to-day observations of homeowners, growers, and cooperative extension service agents also play a role in the detection of pests across the country.

<u>Comment</u>: What actions will the Federal government take if pests are introduced into the United States through the importation of avocados from Mexico? Will the Federal government pay for pest eradication if the introduced pests become established? Are there quarantine treatments available for use in the United States to qualify affected commodities for interstate movement and export if the introduced pests become established?

Response: APHIS' Domestic and Emergency Operations staff has prepared a draft emergency action plan that addresses the Federal response in the unlikely event that a pest outbreak occurs. As with any pest outbreak, APHIS would cooperate with any affected States in assessing the extent of an outbreak, applying mitigative measures to eliminate the pest if

appropriate, and providing for continued agricultural trade from the area affected by the pest outbreak.

<u>Comment</u>: Due to government-wide budget cuts and frozen or reduced staffing levels, APHIS will be unable to enforce the proposed restrictions from the grove in Mexico to the final U.S. consumer. APHIS states that it would make "resource adjustments" to accommodate the proposed avocado import program, but APHIS officials have acknowledged that the agency is finding it difficult to meet its current program demands. Before the proposed rule can go forward, APHIS must demonstrate that it has sufficient resources to execute its responsibilities under the proposed system.

Response: As was stated in the proposed rule, import authorizations will not be provided for Mexican avocados if the level of resources decreases below the level needed to ensure that all imported regulated articles are subject to the level of inspection and monitoring necessary to prevent the introduction of plant pests into the United States. At the present time, it is difficult to provide the details on APHIS monitoring and supervision because we do not yet know the number and total acreage of orchards and the number of packinghouses in Michoacan that will be participating in the avocado export program. We can say, however, that APHIS personnel will be present during the harvest, shipping season, and during critical orchard survey and trapping activities to ensure that the requirements of the regulations are being met.

<u>Comment</u>: I want to have confidence that if this proposal as written is not followed that immediate corrective action will be taken in Mexico and the United States. How can domestic growers have confidence that each element of this complex proposal will be stringently enforced in Mexico and in the United States? What penalties will be enacted for failure to adhere to the requirements?

Response: The introductory text of the regulations in § 319.56-2ff clearly states that fresh Hass avocados may be imported from Mexico into the northeastern United States only if the importation is authorized by a permit and only under the conditions set forth in the regulations; if those conditions are not met, the avocados may not be imported into the United States.

The growers, packers, and shippers in Michoacan have, at the very least, a financial interest in meeting the conditions of the regulations; failure to do so can result in the loss of their ability to export avocados to the United States for an entire shipping season. Beyond that, Sanidad Vegetal personnel will be in the production areas and packinghouses conducting surveys, trapping, and inspections to ensure that the requirements of the regulations are being met. Finally, APHIS inspectors will be present in Mexico and will be directly involved with Sanidad Vegetal in the monitoring and supervision of the required safeguards.

In terms of penalties that would apply for violations committed in the United States, the FPPA and the Plant Quarantine Act provide for a penalty of not more than \$5,000 and imprisonment for not more than 1 year for any person who knowingly violates regulations promulgated under those acts, which is the case with the regulations in this final rule. Civil penalties of up to \$1,000 per violation can be assessed for other violations of the regulations. In addition, the FPPA gives an APHIS inspector the authority to seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of, in such manner as he deems appropriate, any product or article moving into or through the United States in violation of regulations promulgated under the FPPA.

<u>Comment</u>: Mexico allows the use of pesticides that are not allowed or strictly controlled in the United States, the residues of which will be harmful to U.S. consumers.

Response: As we noted in the proposed rule, the U.S. Food and Drug Administration (FDA) samples and tests imported fruits and vegetables for pesticide residues. If residue of a pesticide unapproved in the United States is found in a shipment of imported fruit or vegetables, the shipment is denied entry into the United States by the FDA.

<u>Comment</u>: APHIS should require that the avocados receive quarantine treatments such as fumigation, heat or cold treatments, or irradiation to eliminate the pests of concern while the

avocados are still in Mexico.

Response: There are currently no approved quarantine treatments available for avocados to eliminate the pests of concern. There is no established protocol for the irradiation of avocados, and fumigation is not effective against all the pests, especially the seed weevils. Procedures such as cold treatment, hot water treatment, or hot forced air treatment cannot eliminate those seed pests without significantly degrading the quality of the fruit.

<u>Comment</u>: To comply with the National Environmental Policy Act (NEPA), APHIS should prepare an environmental impact report that takes into account the likelihood of pest establishment in growing areas in California and Florida and the effects that such an infestation will have, such as increased pesticide usage and the burning of infested avocado groves. What will the Federal government do to mitigate the negative impacts of those considerations?

Response: For the proposed rule, those issues were addressed in the supplemental pest risk assessment (e.g., the likelihood of pest establishment on pages 23-35 and environmental impacts on page 22). An environmental assessment and a finding of no significant impact have been prepared for this final rule.

Response to Petitions

On March 15, 1996, the USDA received a petition from the CAC asking that the Department: (1) Reopen the administrative record for the proposed rule for the purpose of receiving newly discovered evidence obtained by the CAC; (2) hold an additional public hearing to explore the newly discovered evidence; and (3) stay further administrative action on the proposed rule pending the outcome of an investigation of the conduct of a foreign agent of the Michoacan Avocado Commission (MAC). On April 12, 1996, the CAC notified USDA that it had obtained additional pest information that would form the basis for a supplemental petition that would be submitted to USDA after CAC had completed its analysis of the pest information.

In a letter dated April 17, 1996, the USDA asked the CAC to submit any substantive information supporting its petition; on April 29, 1996, the CAC complied with that request by delivering a copy of the pest survey information on which the March 15 petition was based. In a letter accompanying the April 29 submission of information, the CAC notified the USDA that a supplemental petition would be delivered to the Department the following week. The supplemental petition was delivered to USDA on May 3, 1996. In that supplemental petition, the CAC reiterated its request that the Department reopen the administrative record to receive new pest evidence and to hold an additional public hearing to explore the new evidence and asked that the Department require APHIS to prepare a new quantitative pest risk assessment based on all available data, including the new data submitted with the supplemental petition. In its May 3 supplemental petition, the CAC also stated that it would continue to seek additional data and that any significant new information would be used as the basis for a new filing to further supplement its petition.

On May 16, 1996, the CAC submitted a new filing in the form of a letter containing additional information intended to support and further supplement those first two requests that the USDA reopen the administrative record, conduct a new quantitative pest risk assessment based on all available data, and hold an additional public hearing on the proposed rule. In that May 16 letter, the CAC made the following additional claims: (1) Chemical treatment programs have failed to eliminate stem weevils in Uruapan, Michoacan, Mexico, and that orchards once found free are being reinfested; (2) local agricultural agencies in Michoacan in charge of field sanitation have not yet complied with procedures set forth by Mexico's Secretaria de Agricultura, Ganadaria y Desarollo Rural (SAGDR); and (3) certain packinghouses have been identified as candidates for handling avocados destined for export to the United States despite the fact that they are located in areas where pests are known to be present at high levels.

The CAC filed a third supplement to the March 15 petition on December 20, 1996, once again requesting that the USDA reopen the administrative record, conduct a new quantitative pest risk assessment based on all available data, and hold an additional public hearing on the

proposed rule. This third filing contained claims that: (1) Recent surveys show that orchards in Michoacan -- including orchards in Sanidad Vegetal's export program -- contain stem weevils and (2) Mexican avocado growers are withdrawing from government plant health programs and the regional association of avocado growers has withdrawn from the MAC.

In its March 15 petition and the May 3, May 16, and December 20, 1996, supplemental filings to that petition, the CAC presented information pertaining to three areas: The prevalence of pests in Michoacan; the activities of local, State, and national agricultural officials in Mexico; and the integrity of the rulemaking process. After carefully reviewing the petition and supplemental filings, we have concluded that the evidence offered by the CAC does not warrant our reopening the administrative record, holding additional hearings, delaying further administrative action on the proposed rule, or preparing a new quantitative pest risk assessment. Therefore, we are denying the CAC petition for the reasons explained below.

First, the CAC stated that the pest survey data it had obtained show that the fruit fly and weevil populations in Michoacan are substantially higher than indicated in earlier prevalence data supplied to USDA by the Mexican government. It follows, the CAC argues, that the USDA's supplemental pest risk assessment, risk management analysis, and the safeguards found in the proposed rule are inadequate because they were primarily based on incomplete pest data that understated the true level of quarantine pests in Mexico.

The CAC claims in its March 15 petition that results of surveys conducted between February 1995 and February 1996 contradict APHIS' conclusion that certain municipalities within the State of Michoacan qualify as areas of low pest prevalence for the purposes of lifting the quarantine on Mexican avocados. (Copies of official Sanidad Vegetal records of the results of those surveys constitute the majority of the supporting information provided to USDA by the CAC on April 26, 1996.) The March 15 petition claims that the survey results reflect positive detection of stem weevils (Copturas aguacatae) in orchards currently enrolled in the avocado export program administered by Sanidad Vegetal and that detections occurred in orchards sampled during the November-December 1995 survey period. The December 20 supplemental filing repeats those claims based on surveys conducted between June and November 1996 that reportedly reflect stem weevil detections in export orchards and orchards that had previously been declared free from that pest. Similarly, in its May 3 supplemental filing, the CAC offers copies of official Sanidad Vegetal seed weevil survey records as evidence that heavy seed weevil infestations exist near Uruapan, which is one of the municipalities that Mexico has indicated will likely be offered for consideration as an approved municipality under the avocado export program described in the proposed rule. Uruapan itself is threatened with seed weevil infestation, the CAC claims, because avocados from the infested area are transported without restrictions or safeguards to packinghouses located in Uruapan. That pest survey information, the CAC claims, indicates that pest levels in Michoacan are higher than previously thought and USDA should, therefore, suspend further action on the proposed rule until new pest risk assessments and risk management analyses can be conducted. In its May 16 letter, the CAC further claims that chemical treatment programs have failed to eliminate stem weevils in Uruapan, Michoacan, thus leaving open the possibility that stem weevil populations will spread throughout the orchards of that municipality.

The proposed rule and its supporting documentation were not predicated on the absence or near-absence of pests throughout the entire State of Michoacan. APHIS acknowledges that the two small seed weevils and the stem weevil are known to exist in Michoacan, which is why the proposed rule contained weevil-specific safeguards to ensure that any avocados exported to the United States would not be infested with those pests. Under the program described in the proposed rule, the detection of a single stem weevil in an orchard would render that orchard ineligible to export avocados to the United States; the detection of any one of the seed weevils would render the entire municipality ineligible. If the seed and stem weevils are present in the growing areas of Michoacan in "readily detectable numbers," as described in the petition, we are confident that surveys conducted or supervised by APHIS employees would detect those

pests and prevent infested orchards and municipalities from being eligible to export avocados to the United States. Moreover, the export eligibility granted to orchards and municipalities must be renewed each year, and that eligibility may be withdrawn at any point during the November through February shipping season based on the detection of a stem weevil, in the case of an orchard, or a seed weevil, in the case of an entire municipality.

In its May 16 letter, the CAC asserts that 4 of the 15 packinghouses identified by SAGDR as "candidates" for packing and exporting avocados to the United States are located in areas where quarantine pests are present, and another 3 of the candidate packinghouses are located in an area where pest population levels are unknown due to operational problems within the local agricultural agency. As noted above, the proposed rule did not assume pest freedom or near-freedom in Michoacan; the system described in the proposed rule, therefore, contains several layers of protection to prevent the potential infestation of harvested fruit during its movement to and handling in packinghouses. Under the program described in the proposed rule, an export packinghouse must be listed on the annual work plan prepared by Sanidad Vegetal and approved by APHIS, so if we had any concerns about the location, condition, or operation of a particular packinghouse we could resolve those concerns as part of the approval process for the work plan. In order to prevent pests from entering the work areas where fruit is inspected, sorted, cleaned, and prepared for shipment, an export packinghouse would have to meet specific conditions regarding its construction and operation and would be prohibited from handling fruit from anywhere but a certified export orchard. The avocados themselves, when being moved from the export orchard to the packinghouse, would have to be protected from fruit fly infestation. It is important to note that the packinghouses identified by SAGDR are "candidates" for participation in the avocado export program; any packinghouse that failed to meet all of the requirements of the program would not qualify for participation in the program.

The CAC reports in its March 15 petition that it had obtained extensive and recent fruit fly trapping records from Tancitaro, Mexico, from trapping conducted between September 1995 and February 1996; the CAC did submit official Sanidad Vegetal fruit fly trapping records as supporting information for that petition. The petition notes that much of that trapping occurred during months that the proposed rule would allow avocados to be imported into the United States. The petition further maintains that fruit flies were found in each of the 33 orchards that were monitored, even though the orchards were extensively treated to control fruit flies.

The CAC is inaccurate in its claims that the fruit fly finds reflected in the data "occurred despite a rigorous and documented program of chemical treatment to control fly infestations." Mexican agricultural officials have long claimed that the Hass avocado is not a fruit fly host, so there is no "rigorous...program of chemical treatment" to eliminate fruit flies in avocado groves in Michoacan. Although APHIS does not accept the Mexican claim that Hass avocados are not attacked by fruit flies, we do believe that the Hass avocado is a non-preferred host while still on the tree. Throughout this rulemaking, we have acknowledged that Anastrepha spp. fruit flies are present in Michoacan and could attack harvested Hass avocados and fruit that has fallen from the trees, which is why the proposed rule contained safeguards to reduce the risk presented by those pests. The proposed requirements, such as surveillance trapping, increased trapping in response to a single fruit fly detection, malathion bait treatments, covering of harvested avocados, fly-proof screens on packinghouses, and inspections, work together with the non-preferred host status of Hass avocado fruit attached to the tree to eliminate any significant risk from Anastrepha. The repeated fruit fly finds portrayed in the CAC's March 15 petition would not occur under the program described in the proposed rule, which requires trapping density to be increased if a single Anastrepha spp. fruit fly is trapped in an orchard and further requires malathion bait sprays to be applied if a second Anastrepha spp. fruit fly is trapped within 30 days and 260 hectares of the first finding.

In its petition, the CAC correctly points out that importation of Hass avocados from Mexico is possible only if the area of origin can be certified pest free for the three species of seed weevil and the seed moth and can be shown to be an area of low pest prevalence for the

stem weevil and fruit flies. The CAC then asserts that its newly obtained data indicate that two of the municipalities in Michoacan cannot properly be characterized as areas of low pest prevalence for fruit flies or the stem weevil. As noted above, a municipality or orchard could gain approval to export avocados to the United States under the program described in the proposed rule only after extensive field surveys conducted or supervised by USDA employees demonstrate municipality freedom from the three species of seed weevils and the seed moth and orchard freedom from the stem weevil. That being the case, some municipalities and orchards in Michoacan may well be ineligible for participation in the program due to the presence of some or all of those pests. That potentiality does not, however, invalidate the entire program, as the CAC seems to suggest. The field surveys are intended to demonstrate that an area is free of certain pests; if that freedom cannot be demonstrated, the importation of avocados from that area will continue to be prohibited.

The second area discussed in the petition and the supplemental filings is the activities of local, State, and national agricultural officials in Mexico. One aspect of this is the CAC's claim that APHIS may be relying on incomplete pest data that understate the true level of quarantine pests in Michoacan. In its March 15 petition, the CAC claims that the pest survey and trapping data that the Mexican government supplied to APHIS are incomplete because the Mexican government decided to withhold one or more positive pest survey reports from the data provided to the USDA due to pressure applied by a "well-connected grower." Judging from the information related in the CAC's March 15 petition and an accompanying declaration, however, the claim that information was withheld to mollify a powerful grower appears to be a mischaracterization of the nature of the incident. The information submitted by CAC shows that a state-level inspector detected weevils (it appears the petition is referring to stem weevils, although the species is not identified) in a grove, the grower sought to have the pest finding overturned or suppressed, but Sanidad Vegetal determined that an infestation did exist and should be documented. The petition hints that there is something unscrupulous about Sanidad Vegetal's subsequent decision not to forward the records for that orchard to the USDA for the purposes of precertifying the orchard for the proposed export program. However, if the records show that the orchard contains stem weevils that would render it ineligible for participation in the proposed export program, it would serve no purpose to pass those records on to the USDA with a request that the orchard be approved for participation in the proposed export program. Obviously, the orchard would not qualify for the program.

In its May 3 supplemental petition, the CAC claims that Mexico made a "conscious decision to withhold damaging pest survey findings from the USDA." The CAC bases that claim on its interpretation of correspondence between APHIS and Sanidad Vegetal, particularly an August 19, 1994, request for data from APHIS and Sanidad Vegetal's September 23, October 10, and October 11, 1994, responses to that request. Once again, the CAC points out that Sanidad Vegetal did not forward all available survey results and other pest data from areas in which seed weevils, stem weevils, or fruit flies had been detected and portrays that lack of data as a deliberate deception on the part of Sanidad Vegetal. APHIS is well aware that those pests are present in Michoacan, and Sanidad Vegetal has not attempted to portray the situation otherwise; in fact, Sanidad Vegetal officials have taken visiting APHIS representatives into infested avocado groves in Michoacan to demonstrate methods of detecting seed weevils and stem weevils. In the August 1994 letter cited by the CAC, APHIS was seeking additional information to help it determine whether an export program based on the freedom of certain orchards and municipalities from seed and stem weevils would be feasible, and the data supplied by Sanidad Vegetal were responsive to that request.

In its May 16 letter, the CAC contends that operational problems "plague" SAGDR's local field sanitation agencies. To support that contention, CAC points to a letter from a SAGDR district chief to one of his district's local plant health boards. The letter, dated April 24, 1996, admonishes the local board for failing to submit any monthly activity reports since the board's formation on September 19, 1995, and informs the board that it faces the risk of

being dissolved unless the reports are submitted promptly. The CAC claims that the letter, coupled with what is described by a CAC contact in Mexico as grower mistrust of government agencies, casts doubt on Mexico's ability to oversee the pest survey, trapping, and registration activities described in the proposed rule. Under this final rule, the personnel conducting the trapping and pest surveys must be hired, trained, and supervised by Sanidad Vegetal or by the Michoacan State delegate of SAGDR, and APHIS will be directly involved with Sanidad Vegetal in the monitoring and supervision of those activities. The trapping and pest surveys are integral aspects of the avocado export program; if the scope and conduct of those activities in a particular municipality did not meet with APHIS' approval, the municipality, and all the orchards within that municipality, would be ineligible for participation in the program.

In its December 20 supplemental filing, the CAC contends that substantial numbers of Mexican avocado growers are abandoning the Mexican government's plant health programs and that the regional association of avocado growers in Michoacan has withdrawn from the MAC. These developments, the CAC claims, provides evidence that the plant health infrastructure in Mexico is weakening at all levels, which will result in major problems that will threaten U.S. agriculture if the importation of Mexican avocados is authorized. We certainly agree that grower participation in government plant health programs is an important element in the control and prevention of plant pest problems in the avocado-producing municipalities of Michoacan, which is why the regulations in this final rule require that each orchard and grower wishing to export avocados to the United States must be registered with Sanidad Vegetal's avocado export program and must be listed as an approved orchard or an approved grower in the annual work plan provided to APHIS by Sanidad Vegetal. Therefore, any Michoacan growers who abandon the Mexican government's plant health programs will simply not be eligible to export avocados to the United States. Similarly, the regulations also clearly state that avocados may be imported only if the Mexican avocado industry association representing Mexican avocado growers, packers, and exporters -- i.e., the MAC -- has entered into a trust fund agreement with APHIS to pay in advance all estimated costs that APHIS expects to incur through its involvement in the trapping, survey, harvest, and packinghouse operations required as safeguards in Mexico. A document submitted by the CAC with its December 20 filing appears to indicate that dissension within the MAC has led a regional growers group to temporarily withdraw from the MAC. If that is indeed the case, it appears that some accommodation would have to be reached within the MAC for that organization to remain a viable entity capable of executing a trust fund agreement with APHIS. Without a trust fund agreement, avocados may not be exported under the regulations in this final rule.

Report language attached to the Department's 1997 appropriations bill directed the Secretary of Agriculture to review recent evidence of pest infestation in Mexico -- i.e., the pest-related information submitted to APHIS by the CAC in its petition and supplemental filings -- and determine whether the original data that APHIS relied upon is sound and complete. As discussed above, we have thoroughly examined all of the information submitted by the CAC and have determined that the original data upon which APHIS relied is sound and complete and serves as a reliable basis for this rule and the risk-mitigating safeguards it contains. Further, the pest surveys and fruit fly trapping required by this rule as a prerequisite to the approval of municipalities and orchards for participation in the avocado export program will provide the ongoing APHIS-supervised pest monitoring mentioned in the report language.

The third and final area, which is discussed only in the March 15 petition, is the CAC's claim that there is evidence to suggest that a foreign agent for the MAC engaged in activities that violated Federal conflict-of-interest laws and Federal lobbying laws. The petition also states that the same agent had substantive <u>ex parte</u> communications with USDA personnel prior to and after the Department's decision to issue the proposed rule. The petition contends that the illegal activities of the agent and USDA's apparent practice of permitting substantive <u>ex parte</u> communication between USDA and the supporters, but not the opponents, of the proposed rule have "irreparably tainted the integrity and propriety" of the rulemaking proceeding.

APHIS believes that the allegations in the petition regarding the agent's employment with the MAC and the nature of a contractual arrangement the agent may have had with the MAC do not bear upon on the integrity of this rulemaking proceeding. APHIS acknowledges that if the allegations are shown to be supported and it is determined that the agent violated conflict-of-interest laws or contracted for a "success fee" for lobbying on the behalf of a foreign client in violation of lobbying laws, those actions may indeed have serious ramifications for the agent. It does not follow, however, that the alleged activities of a single interested party would affect the manner in which USDA has conducted this rulemaking proceeding. Indeed, USDA was unaware of the alleged contractual and other arrangements until the allegations were made in the petition. The fact of the matter is that the alleged arrangements had absolutely no effect on the rulemaking proceeding or the decisions reached by APHIS with regard to this final rule.

A review of the calendars and daily activity logs of Department officials indicates that the petitioner's contention that USDA engaged in prohibited <u>ex parte</u> communication with the agent while denying requests for meetings from opponents of the proposed rule is incorrect. Those records indicate that courtesy visits were paid to USDA officials by both opponents and supporters of the proposed rule following the proposed rule's publication. Any written materials given to USDA officials during those visits were placed in the public rulemaking record, and those officials report that substantive issues pertaining to the proposed rule were not discussed.

Therefore, based on the rationale set forth in the proposed rule and in this document, we are adopting the provisions of the proposal as a final rule with the changes discussed in this document.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be significant for purposes of Executive Order 12866, and, therefore, has been reviewed by the Office of Management and Budget.

In accordance with 5 U.S.C. 604, we have performed a Final Regulatory Flexibility Analysis, which is set out below, regarding the impact of this rule on small entities.

This rule will allow fresh Hass avocado fruit grown in approved orchards in approved municipalities in Michoacan, Mexico, to be imported into the United States under certain conditions designed to prevent the introduction and dissemination of plant pests. In the July 1995 proposed rule, we invited comments concerning the potential effects on small entities of the proposed Mexican avocado importation program and noted that we were particularly interested in determining the number and kind of small entities that may incur benefits or costs from implementation of the program. Some commenters -- mostly owners and employees of produce markets or retail operations, customs brokers, and representatives of other agricultural interests such as apple and citrus growers, packers, and shippers -- stated that they expected to benefit from the proposed avocado import program through increased business or expanded export opportunities for other U.S. agricultural products.

Many other commenters took the opposite view, however. Slightly more than 60 percent of the 2,080 individuals who commented on the proposed rule identified themselves as working in the domestic avocado industry, either directly as growers, packers, and shippers, or indirectly as part of their work in associated fields (agricultural consultants, pest control advisors, nurserymen, etc.). Many of those commenters believed that they would be negatively affected by the proposed avocado import program because of the wide price disparity between domestically produced avocados and the less expensive Mexican-origin avocados. Those commenters stated that they would be unable to compete in the approved States during the import period and that the low price of the Mexican product would encourage illegal transshipment of the Mexican avocados to areas outside the approved States. Several commenters criticized the initial regulatory flexibility analysis for failing to pay sufficient attention to Florida avocado production.

The initial regulatory flexibility analysis published in the proposed rule noted that we did

not at that time have all the data necessary for a comprehensive analysis of economic effects, and thus invited comments concerning potential effects. The initial regulatory flexibility analysis was based on data available to us at the time it was written, and came to some broad conclusions about approximate effects based on a simple model employing some basic data about supply and price gleaned from the overall U.S. and Mexican avocado markets. Among the preliminary conclusions was a likely increase in the availability of fresh avocados to U.S. consumers by about 12 percent, reducing the average at-the-farm price for U.S. avocados to about \$0.42 per pound. However, as several commenters pointed out, the marketing of avocados in the United States is very complex, with effects arising from established practices in the food marketing sector and the patterns of the wholesale and retail distribution structure. Commenters also pointed out that an accurate analysis should focus on price and supply data that are specific to the months when Hass avocados would be allowed entry, and should be based on the average values for those months over a multi-year period.

We have taken these and other comments into account and employed additional data supplied by commenters. We have obtained data on Mexican and U.S. production and exports covering a 5-year period (1990-1994). As a result, this final regulatory flexibility analysis examines more complex economic scenarios than the initial regulatory flexibility analysis and provides a more detailed analysis. By using improved models with more extensive, multi-year data, we have examined effects in both approved and non-approved States that take into consideration several possible reactions by both U.S. and Mexican businesses. We have provided analyses based on a range of U.S. imports of Mexican avocados. We have also examined several different possible responses by U.S. producers, ranging from partial to complete redirection of their product away from approved States during months when Hass avocados from Michoacan would be allowed entry.

This rule will directly affect avocado growers, particularly growers of Hass variety avocados, so its impact will be felt mainly in California. The United States produced an average of 189,244 tons¹ of avocados per year between 1990 and 1994; of this amount, California accounted for 91.4 percent, Florida 8.4 percent, and Hawaii the remaining 0.2 percent. The farm value of U.S. production ranged from \$118 million to \$255 million, of which 98 percent was for the fresh market. There were 7,203 avocado growers in the United States in 1992 (1 in Arizona, 5,973 in California, 604 in Florida, 610 in Hawaii, and 15 in Texas); 98.5 percent of these operations are considered to be small entities. (According to the standard set by the Small Business Administration for agricultural producers, a producer with less than \$0.5 million annually in sales qualifies as a small entity.) California avocado producers, including small entities, derive a substantial degree of income from off-farm employment. According to a 1994 report by the Economic Research Service, 55 percent of operators of California avocado farms reported working off the farm at least 100 days a year. Approximately 44 percent reported working off the farm at least 200 days a year.

Florida is less likely to be affected because fewer growers there produce Hass variety avocados; most produce a lower-cost greenskin variety. In general, if two commodities are substitutable, a change in the price of one, ceteris paribus, causes a change in the same direction in the quantity purchased of the other. If the two commodities have comparable quality and are considered substitutable, then the differences between their prices would not be large (the degree of substitutability depends on the cross elasticities of demand between the two commodities). However, the data show that the prices received by farmers and the wholesale prices of greenskin variety avocados, which is the dominant variety grown in Florida, are substantially lower than prices received for Hass variety avocados. For example, the price received by avocado growers in California was \$0.79 per pound in 1994, while the price received by Florida growers during the same year was \$0.31 per pound. Similarly, the average

<sup>&</sup>lt;sup>1</sup> All tons in this analysis are short tons (2,000 pounds).

wholesale market price for California Hass avocados was \$1.72 per pound (average for Boston, Chicago, Los Angeles, New York, and Philadelphia) during the third week of December 1995, while the average wholesale price for the greenskin variety was \$0.44 per pound. If the price differential was the only market signal of preference for the two products, then the Hass variety would be driven out of the market, but this is not the case. The wholesale price of the California Hass avocado is \$1.96 per pound in Miami, while the price of the Florida greenskin variety is only \$0.42 per pound.

U.S. exports averaged 11,583 tons between 1990 and 1994, while imports were about 19,119 tons. Over this period, about 94 percent of the U.S. production of avocados was consumed domestically. The largest importer of U.S. avocados is Canada. The other major markets for U.S. avocados include France, Japan, and the United Kingdom. The largest suppliers of imports to the United States are Chile and the Dominican Republic.

Mexico is the largest producer of avocados in the world, accounting for approximately 40 percent of world production. An average of 807,000 tons per year was produced between 1990 and 1994. Most of the avocado production in Mexico occurs in the State of Michoacan, accounting for approximately 77 percent of the total. The Hass variety accounts for 95 percent of the avocado production in Michoacan. Mexico is also one of the world's largest exporters of fresh avocados. Exports averaged 22,000 tons per year between 1990 and 1994. The average rate of export between 1990 and 1994 was about 2.75 percent of production, with the rest being consumed domestically.

Avocados are shipped from U.S. domestic sources throughout the year. Florida's peak marketing season is between July and December, while California's is between March and August. The 19 northeastern States and the District of Columbia (the approved States) receive between 12 and 18 percent of the shipments of California avocados annually. California shipments to the approved States during the period allowed in this final rule (November through February) account for only 2.3 to 4.6 percent (or about 3,900 to 4,850 tons) of total annual California avocado shipments. Imports account for about 42 percent of the supply in the approved States during those months; California avocados account for about 36 percent of the supply in the approved States during that same period. The remainder, about 22 percent of the supply, comes from Florida.

Mexican avocados could be sold at substantially lower prices than California avocados. However, consumer purchases may not be proportional to price changes, should they occur. Additionally, since many grocery stores and supermarkets are likely to be carrying avocados from only one source at any given time, consumers may not have the option of comparing price and quality of avocados from different areas. The retail price differentials might not be representative of the actual cost differences between avocados from the two sources, as retailers may not mark the exact price differential. This is evidenced by the small difference in wholesale prices between California Hass and Chilean Hass avocados. While the import price of Chilean Hass avocados was only \$0.67 per pound, the wholesale price in the six major northeastern cities was about \$1.46 per pound during the third week of December 1995. The average wholesale price of the California Hass avocado was \$1.72 per pound during the same period. If a similar price pattern would hold for Mexican Hass avocados, wholesale prices will not differ as widely between Mexican avocados and others available on the domestic market as expected by some. The costs associated with illegal transshipment (e.g., relabeling the product and illegally transporting it outside the approved States) make it unlikely that price differences between domestic and Mexican-origin Hass avocados will be great enough to lead to transshipment of Hass avocados imported under this final rule.

Allowing importation of Hass avocados from Mexico is expected to have a variable impact upon domestic entities. The magnitude of the impact would depend upon the size of the pre-import supply, pre-import avocado price, and the elasticities of demand. In this final regulatory flexibility analysis, which was developed, in part, using price and production data submitted by commenters, two scenarios in which affected entities may be impacted by various

levels of Mexican avocado imports are examined. In one scenario, California Hass avocado growers, in reaction to the entry of Mexican imports, redirect a percentage of the avocados they otherwise ship to markets in the approved States to markets in non-approved States (Table 1); in the other scenario, we examine the unlikely situation in which there is a complete redirection of California Hass avocados from markets in the approved States to markets in the non-approved States.

Based on data from 1990 through 1994, the average wholesale price in the approved States during the months of November through February -- the 4 months that avocados can be imported into the approved States under this rule -- was about \$1.56 per pound and the available quantity was about 10,500 tons. The wholesale price and supply were \$1.47 per pound and 26,500 tons, respectively, in the non-approved States. Price changes in the two scenarios are measured against their average levels.

The level of Hass avocado exports from Michoacan, Mexico, during November through February is currently about 9,400 tons. The import levels in the top row of Table 1 reflect a 10, 20, 30, 40, and 50 percent diversion of current Michoacan Hass avocado exports from other markets to markets in the approved areas of the United States.

Table 1: The importation of Hass avocados from Michoacan, Mexico, to approved

States: Impact in the United States with a partial redirection of

U.S. grown Hass avocados from markets in approved States to markets

in non-approved States (price elasticity is -1.07).

	Percentage of current Michoacan exports diverted to the U.S. market:				
	10	20	30	40	50
Imports					
(tons)	940	1,880	2,820	3,760	4,700
California Hass avocados					
diverted to non-approved					
States (tons)	153	306	459	612	765
Percent change in price					
In the approved States	(8)	(16)	(25)	(33)	(41)
In non-approved States	(1)	(1)	(2)	(2)	(3)
Change in producer surplus					
(millions of dollars)	(1.37)	(2.70)	(3.99)	(5.24)	(6.44)
Change in consumer surplus					
(millions of dollars)	3.31	6.86	10.66	14.71	18.98
Total surplus					
(millions of dollars)	1.94	4.16	6.67	9.47	12.54

Table 1 summarizes the estimated economic impacts in the United States, based on a price elasticity of -1.07, which was estimated using data provided in comments by the California Avocado Commission<sup>2</sup>. The estimated economic impacts result from the entry of imported Mexican Hass avocados into markets in the approved States and from the estimated producer losses and consumer gains that would result from a

<sup>&</sup>lt;sup>2</sup> Garoyan, Leon, "Proposed Rule for the Importation of Fresh Hass Avocado Fruit Grown in Michoacan, Mexico: An Analysis of the Impact on California's Avocado Industry," Management Research Associates, August 22, 1995. (Prepared for the California Avocado Commission (CAC) and attached as Exhibit 30 to the CAC's October 13, 1995, comments on the proposed rule.) The price elasticity of -1.07 was estimated using data from Appendix Table 1 of that report covering North East and East Central regions of the United States for the months of November to February between 1986 and 1994.

partial redirection of U.S. grown Hass avocados from markets in the approved States to non-approved States. For example, a 10 percent diversion of present Michoacan exports from markets in other countries to the United States results in a price decrease of 8 percent in the approved States and a price decrease of 1 percent in the non-approved States. California producers would lose about \$1.37 million, while consumers would gain about \$3.31 million. The net benefit in this scenario would be about \$1.94 million. If a 50 percent diversion of present Michoacan exports from other markets to the United States were to occur, there would be a resulting price decrease of about 41 percent in the approved States and about 3 percent in the non-approved States. Producers would lose about \$6.44 million and consumers would gain about \$18.98 million, resulting in a net benefit of about \$12.54 million.

In sum, as a result of the importation of Mexican avocados to the approved States and partial redirection of domestically grown avocados, California Hass avocado producers would lose between \$1.37 million and \$6.44 million, i.e., about 0.5 percent to 5.4 percent of their crop's farm value, while consumers in the approved and non-approved States would gain between \$3.31 million and \$19 million. Consumer gains are larger than producer losses in all cases.

In the unlikely scenario where complete redirection would occur, U.S. producers would abdicate the markets in the approved States to Mexican imports during the approved import period and would redirect their supply to markets in non-approved States. In this case, imports from Mexico would replace California Hass avocados in the approved States so that the actual supply in those markets would not change, and thus no impact would be expected in the approved States. The only impacts would be those in non-approved States. The extent of any actual decrease in prices would depend to a great degree upon the size of the price elasticity of demand and magnitude of the change in supply. For an elasticity of -1.07 and with a 10-percent diversion of present Michoacan exports from other countries to the United States, the resulting price decrease is 3 percent in the non-approved States. California producers would lose \$2.31 million and consumers would gain \$2.63 million. The net benefit in this case would be \$0.32 million. A 50-percent diversion of present Michoacan exports from other countries to the United States results in a price decrease of 17 percent. Producers could lose \$11.14 million and consumers could gain \$14.03 million in the nonapproved States. The net benefit in this case would be \$2.89 million. For lower price elasticities, both losses and gains are higher. Thus, in the unlikely event of total redirection of domestically grown Hass avocado from approved States to non-approved States, California Hass avocado producers could lose between \$2.31 million and \$11.14 million, i.e. about 0.9 percent to 9.4 percent of their crop's farm value, while consumers in non-approved States could gain between \$2.63 million and \$14.03 million. In all cases, consumer gains outweigh grower losses.

The only significant alternative to this rule is to make no changes in the fruits and vegetables regulations, i.e., to continue to prohibit the importation of fresh avocados from Mexico. Prior to the publication of the proposed rule that preceded this rule, we had rejected that alternative because there appeared to be no pest risk reason to maintain the prohibition on the avocados in light of the safeguards that would be applied to their importation. In the course of this rulemaking, we have found no new evidence indicating that the importation of fresh Hass avocados under the conditions set forth in this rule will present a significant risk of plant pest introduction.

Executive Order 12988

This rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule will allow fresh Hass avocado fruit to be imported into the United States from the Mexican State of Michoacan. State and local laws and regulations regarding fresh Hass avocado fruit imported under this rule will be preempted while the avocados are in foreign commerce. Fresh avocados are generally imported for immediate distribution and sale to the public, and remain in foreign commerce until sold to the ultimate consumer. The question of when foreign commerce ceases in other cases must be addressed on a case-bycase basis. This rule has no retroactive effect and does not require administrative proceedings before parties may file suit in court.

National Environmental Policy Act

An environmental assessment and finding of no significant impact have been prepared for this rule. The assessment provides a basis for the conclusion that the importation of fresh Hass avocados from Michoacan, Mexico, under the conditions specified in this rule will not present a significant risk of

introducing or disseminating plant pests and would not have a significant impact on the quality of the human environment. Based on the finding of no significant impact, the Administrator of the Animal and Plant Health Inspection Service has determined that an environmental impact statement need not be prepared.

The environmental assessment and finding of no significant impact were prepared in accordance with: (1) The National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321 <u>et seq.</u>), (2) Regulations of the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR parts 1500-1508), (3) USDA regulations implementing NEPA (7 CFR part 1b), and (4) APHIS' NEPA Implementing Procedures (7 CFR part 372).

Copies of the environmental assessment and finding of no significant impact are available for public inspection at USDA, room 1141, South Building, 14th Street and Independence Avenue SW., Washington, DC, between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to inspect copies are requested to call ahead on (202) 690-2817 to facilitate entry into the reading room. In addition, copies may be obtained by writing to the individual listed under "FOR FURTHER INFORMATION CONTACT."

#### Paperwork Reduction Act

This final rule contains an information collection requirement that was not included in the proposed rule. Specifically, this final rule requires that fruit be labeled with a sticker that bears the Sanidad Vegetal registration number of the packing house. In accordance with section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.), this information collection requirement has been submitted for approval to the Office of Management and Budget (OMB). When OMB notifies us of its decision, we will publish a document in the Federal Register providing notice of the assigned OMB control number or, if approval is denied, providing notice of what action we plan to take. List of Subjects in 7 CFR Part 319

Bees, Coffee, Cotton, Fruits, Honey, Imports, Nursery Stock, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Rice, Vegetables.

Accordingly, 7 CFR part 319 is amended as follows:

#### PART 319--FOREIGN QUARANTINE NOTICES

1. The authority citation for part 319 continues to read as follows:

Authority: 7 U.S.C. 150dd, 150ee, 150ff, 151-167, 450, 2803, and 2809; 21 U.S.C. 136 and 136a; 7 CFR 2.22, 2.80, and 371.2(c).

2. A new § 319.56-2ff is added to read as follows:

§ 319.56-2ff Administrative instructions governing movement of Hass avocados from Mexico to the northeastern United States.

Fresh Hass variety avocados (<u>Persea americana</u>) may be imported from Mexico into the United States for distribution in the northeastern United States only under a permit issued in accordance with § 319.56-4, and only under the following conditions:

- (a) Shipping restrictions. (1) The avocados may be imported in commercial shipments only;
- (2) The avocados may be imported only during the months of November, December, January, and February; and
- (3) The avocados may be distributed only in the following northeastern States: Connecticut, Delaware, the District of Columbia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and Wisconsin.
- (b) Trust fund agreement. The avocados may be imported only if the Mexican avocado industry association representing Mexican avocado growers, packers, and exporters has entered into a trust fund agreement with the Animal and Plant Health Inspection Service (APHIS) for that shipping season. That agreement requires the Mexican avocado industry association to pay in advance all estimated costs that APHIS expects to incur through its involvement in the trapping, survey, harvest, and packinghouse operations prescribed in paragraph (c) of this section. These costs will include administrative expenses incurred in conducting the services and all salaries (including overtime and the Federal share of employee benefits), travel expenses (including per diem expenses), and other incidental expenses incurred by the inspectors in performing these services. The agreement requires the Mexican avocado industry association

to deposit a certified or cashier's check with APHIS for the amount of those costs, as estimated by APHIS. If the deposit is not sufficient to meet all costs incurred by APHIS, the agreement further requires the Mexican avocado industry association to deposit with APHIS a certified or cashier's check for the amount of the remaining costs, as determined by APHIS, before the services will be completed. After a final audit at the conclusion of each shipping season, any overpayment of funds would be returned to the Mexican avocado industry association or held on account until needed.

- (c) <u>Safeguards in Mexico</u>. The avocados must have been grown in the Mexican State of Michoacan in an orchard located in a municipality that meets the requirements of paragraph (c)(1) of this section. The orchard in which the avocados are grown must meet the requirements of paragraph (c)(2) of this section. The avocados must be packed for export to the United States in a packinghouse that meets the requirements of paragraph (c)(3) of this section. Sanidad Vegetal must provide an annual work plan to APHIS that details the activities that Sanidad Vegetal will, subject to APHIS' approval of the work plan, carry out to meet the requirements of this section; APHIS will be directly involved with Sanidad Vegetal in the monitoring and supervision of those activities. The personnel conducting the trapping and pest surveys must be hired, trained, and supervised by Sanidad Vegetal or by the Michoacan State delegate of the Secretaria de Agricultura, Ganaderia y Desarrollo Rural (SAGDR).
- (1) <u>Municipality requirements</u>. (i) The municipality must be listed as an approved municipality in the annual work plan provided to APHIS by Sanidad Vegetal.
- (ii) The municipality must be surveyed at least annually and found to be free from the large avocado seed weevil Heilipus lauri, the avocado seed moth Stenoma catenifer, and the small avocado seed weevils Conotrachelus aguacatae and C. perseae. The survey must cover at least 300 hectares in the municipality and include randomly selected portions of each registered orchard and areas with wild or backyard avocado trees. The survey must be conducted during the growing season and completed prior to the harvest of the avocados.
- (iii) Trapping must be conducted in the municipality for Mediterranean fruit fly (Medfly) (<u>Ceratitis capitata</u>) at the rate of 1 trap per 1 to 4 square miles. Any findings of Medfly must be reported to APHIS.
- (2) Orchard and grower requirements. The orchard and the grower must be registered with Sanidad Vegetal's avocado export program and must be listed as an approved orchard or an approved grower in the annual work plan provided to APHIS by Sanidad Vegetal. The operations of the orchard must meet the following conditions:
- (i) The orchard and all contiguous orchards and properties must be surveyed annually and found to be free from the avocado stem weevil <u>Copturus aguacatae</u>. The survey must be conducted during the growing season and completed prior to the harvest of the avocados.
- (ii) Trapping must be conducted in the orchard for the fruit flies <u>Anastrepha ludens</u>, <u>A. serpentina</u>, and <u>A. striata</u> at the rate of one trap per 10 hectares. If one of those fruit flies is trapped, at least 10 additional traps must be deployed in a 50-hectare area immediately surrounding the trap in which the fruit fly was found. If within 30 days of the first finding any additional fruit flies are trapped within the 260-hectare area surrounding the first finding, malathion bait treatments must be applied in the affected orchard in order for the orchard to remain eligible to export avocados.
- (iii) Avocado fruit that has fallen from the trees must be removed from the orchard at least once every 7 days and may not be included in field boxes of fruit to be packed for export.
  - (iv) Dead branches on avocado trees in the orchard must be pruned and removed from the orchard.
- (v) Harvested avocados must be placed in field boxes or containers of field boxes that are marked to show the Sanidad Vegetal registration number of the orchard. The avocados must be moved from the orchard to the packinghouse within 3 hours of harvest or they must be protected from fruit fly infestation until moved.
- (vi) The avocados must be protected from fruit fly infestation during their movement from the orchard to the packinghouse and must be accompanied by a field record indicating that the avocados originated from a certified orchard.
- (3) <u>Packinghouse requirements</u>. The packinghouse must be registered with Sanidad Vegetal's avocado export program and must be listed as an approved packinghouse in the annual work plan provided to APHIS by Sanidad Vegetal. The operations of the packinghouse must meet the following conditions:

- (i) During the time the packinghouse is used to prepare avocados for export to the United States, the packinghouse may accept fruit only from orchards certified by Sanidad Vegetal for participation in the avocado export program.
- (ii) All openings to the outside must be covered by screening with openings of not more than 1.6 mm or by some other barrier that prevents insects from entering the packinghouse.
- (iii) The packinghouse must have double doors at the entrance to the facility and at the interior entrance to the area where the avocados are packed.
- (iv) Prior to the culling process, a sample of 300 avocados per shipment must be selected, cut, and inspected by Sanidad Vegetal and found free from pests.
- (v) The identity of the avocados must be maintained from field boxes or containers to the shipping boxes so the avocados can be traced back to the orchard in which they were grown if pests are found at the packinghouse or the port of first arrival in the United States.
- (vi) Prior to being packed in boxes, each avocado fruit must be cleaned of all stems, leaves, and other portions of plants and labeled with a sticker that bears the Sanidad Vegetal registration number of the packinghouse.
- (vii) The avocados must be packed in clean, new boxes. The boxes must be clearly marked with the identity of the grower, packinghouse, and exporter, and the statement "Distribution limited to the following States: CT, DC, DE, IL, IN, KY, ME, MD, MA, MI, NH, NJ, NY, OH, PA, RI, VA, VT, WV, and WI."
- (viii) The boxes must be placed in a refrigerated truck or refrigerated container and remain in that truck or container while in transit through Mexico to the port of first arrival in the United States. Prior to leaving the packinghouse, the truck or container must be secured by Sanidad Vegetal with a seal that will be broken when the truck or container is opened. Once sealed, the refrigerated truck or refrigerated container must remain unopened until it reaches the port of first arrival in the United States.
- (ix) Any avocados that have not been packed or loaded into a refrigerated truck or refrigerated container by the end of the work day must be kept in the screened packing area.
- (d) <u>Certification</u>. All shipments of avocados must be accompanied by a phytosanitary certificate issued by Sanidad Vegetal certifying that the conditions specified in this section have been met.
- (e) Pest detection. (1) If any of the avocado seed pests Heilipus lauri, Conotrachelus aquacatae, C. perseae, or Stenoma catenifer are discovered in a municipality during an annual pest survey, orchard survey, packinghouse inspection, or other monitoring or inspection activity in the municipality, Sanidad Vegetal must immediately initiate an investigation and take measures to isolate and eradicate the pests. Sanidad Vegetal must also provide APHIS with information regarding the circumstances of the infestation and the pest risk mitigation measures taken. The municipality in which the pests are discovered will lose its pest-free certification and avocado exports from that municipality will be suspended until APHIS and Sanidad Vegetal agree that the pest eradication measures taken have been effective and that the pest risk within that municipality has been eliminated.
- (2) If Sanidad Vegetal discovers the stem weevil <u>Copturus aguacatae</u> in an orchard during an orchard survey or other monitoring or inspection activity in the orchard, Sanidad Vegetal must provide APHIS with information regarding the circumstances of the infestation and the pest risk mitigation measures taken. The orchard in which the pest was found will lose its export certification immediately and will be denied export certification for the entire shipping season of November through February.
- (3) If Sanidad Vegetal discovers the stem weevil <u>Copturus aguacatae</u> in fruit at a packinghouse, Sanidad Vegetal must investigate the origin of the infested fruit and provide APHIS with information regarding the circumstances of the infestation and the pest risk mitigation measures taken. The orchard where the infested fruit originated will lose its export certification immediately and will be denied export certification for the entire shipping season of November through February.
  - (f) Ports. The avocados may enter the United States at:
  - (1) Any port located in the northeastern States specified in paragraph (a)(3) of this section;
- (2) The ports of Galveston or Houston, TX, or the border ports of Nogales, AZ, or Brownsville, Eagle Pass, El Paso, Hidalgo, or Laredo, TX; or
  - (3) Other ports within that area of the United States specified in paragraph (g) of this section.

- (g) Shipping areas. Except as explained below in this paragraph for avocados that enter the United States at Nogales, AZ, avocados moved by truck or rail car may transit only that area of the United States bounded on the west by a line extending from El Paso, TX, to Denver, CO, and due north from Denver; and on the east and south by a line extending from Brownsville, TX, to Galveston, TX, to Kinder, LA, to Memphis, TN, to Knoxville, TN, following Interstate 40 to Raleigh, NC, and due east from Raleigh. All cities on these boundary lines are included in this area. If the avocados are moved by air, the aircraft may not land outside this area. Avocados that enter the United States at Nogales, AZ, must be moved to El Paso, TX, by the route specified on the permit, and then must remain within the shipping area described above in this paragraph.
- (h) Shipping requirements. The avocados must be moved through the United States either by air or in a refrigerated truck or refrigerated rail car or in a refrigerated container on a truck or rail car. If the avocados are moved in a refrigerated container on a truck or rail car, an inspector must seal the container with a serially numbered seal at the port of first arrival in the United States. If the avocados are moved in a refrigerated truck or a refrigerated rail car, an inspector must seal the truck or rail car with a serially numbered seal at the port of first arrival in the United States. If the avocados are transferred to another vehicle or container in the United States, an inspector must be present to supervise the transfer and must apply a new serially numbered seal. The avocados must be moved through the United States under Customs bond.
- (i) <u>Inspection</u>. The avocados are subject to inspection by an inspector at the port of first arrival, at any stops in the United States en route to the northeastern States, and upon arrival at the terminal market in the northeastern States. At the port of first arrival, an inspector will sample and cut avocados from each shipment to detect pest infestation.

Done in Washington, DC, this 31st day of January 1997.

/s/ Terry L. Medley

Administrator, Animal and Plant Health Inspection Service.